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THE UNIVERSITY OF ALBERTA

A STUDY OF THE EFFECTS OF INSTRUCTION IN THE RHETORIC OF THE SENTENCE ON THE WRITTEN COMPOSITION OF JUNIOR HIGH SCHOOL STUDENTS

BY

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "A Study of the Effects of Instruction in the Rhetoric of the Sentence on the Written Composition of Junior High School Students" submitted by Joel Lancelot Gajadharsingh in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

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ABSTRACT

The experiment was designed to study the effects of instruction in the rhetoric of the sentence on the written composition of grade seven, eight, and nine students.

Six classes were selected at each of the three grade levels. Three classes at each grade level were randomly designated as the experimental group, and three as the control group. At each grade level, three teachers were asked to teach one class in both the experimental group and the control group.

Both groups were given a pretest consisting of a Written Expressional Test and a Written Composition Test. Five weeks of instruction followed. The control group was given instruction in writing through traditional grammar, and the experimental group was given instruction in Christensen's rhetoric of the sentence. The experiment concluded with the writing of the posttest during the sixth week.

The written compositions of a sample of 216 students randomly selected from the experimental and the control groups at the three grade levels were evaluated by three experienced junior high school teachers of English.

The scores on the Written Expressional Test, its Subtests, the Written Composition Test, and the frequency count for each of the indices of a mature style of writing produced significant F values for the treatment effect. The results consistently revealed that the students in the experimental

group demonstrated a more mature style of writing than the students in the control group.

Significant interactions were found among the main factors. The interaction between treatment and ability indicated that in the control group, the high ability students invariably performed better than the mid and the low ability students. In the experimental group, however, the low ability students performed almost as well as the high and the mid ability students. The interaction between treatment and grade revealed a similar pattern. In the control group, the grade nine students performed better than the grade eight and grade seven students. In the experimental group, however, the grade seven students generally performed equally as well as the grade nine students when a mature style of writing was the primary consideration. The interaction between grade and ability did not reveal any clear pattern.

Finally, the results of the retention test indicated that there was no significant difference between the performance of students in the experimental group on the posttest and their performance on the retention test. Students were not only able to recall the syntactic structures taught to them, but they were able to use them in their writing at a later time.

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CHAPTER I

INTRODUCTION

Recent research in language, and in language development, has led to an increased interest in the teaching of written composition at the elementary, junior high, senior high, and college levels. Theories, models, and methods of teaching written composition, fashionable a decade or two ago, are now being questioned. New philosophies, paradigms, and procedures are being developed, and new insights into teaching written composition are being suggested.

In recent years interest in the possibilities of improving instruction in written composition has spread widely and rapidly among professors, researchers, and classroom teachers. Teachers in the junior and senior high schools, in endeavouring to improve students' ability to use their native language effectively, have devoted a large part of their time to the teaching of English grammar. Researchers have confirmed, however, that instruction in formal grammar has little or no effect on the quality of student composition.[1]

The more recent literature in the language arts revealed conflicting results and opinions regarding the relationship between ability in written composition and various aspects of grammatical knowledge. The proponents of linguistics claim

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[1] Richard Braddock, R.Lloyd-Jones, and L. Schoer, Research in Written Composition, Champaign, Illinois: NCTE, 1963, p. 37.

that linguistic knowledge can be of value to beginning writers.[2] In fact, Suggs states, "it seems quite safe to conclude that ... instruction in the English language according to linguistic science is superior to traditional grammar and its practical application to writing."[3] While traditional grammarians claim that traditional grammar can help to solve the problem of writing,[4] White's research in structural grammar concludes that teaching introductory material from structural grammar has a greater beneficial effect on writing than does the teaching of traditional grammar or does the total absence of grammar.[5] Scholars of generative grammar also suggest that the study of generative grammar can offer real insights into the process of writing. As Zidonis says, "There is a relation between a knowledge of generative grammar and the ability to produce well-formed sentences of great structural complexity."[6]

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[2]Verna L. Newsome, "Expansions and Transformations to Improve Sentences," English Journal, Vol. LVIII, May, 1964, pp. 53, 327-335.

[3]Lena R. Suggs, "Structural versus Traditional Grammar in Influencing Writing," English Journal, Vol. L, March, 1961, pp. 174-178.

[4]D.M. Wolfe, "Grammar and Linguistics: A Contrast in Realities," English Journal, Vol. LVIII, 1964, pp. 73-78, 110.

[5]Robert H. White, "The Effect of Structural Linguistics in Improving English Composition Compared to that of Prescriptive Grammar or the Absence of Grammar Instruction." Unpublished Doctoral dissertation, University of Arizona, 1964.

[6]Frank J. Zidonis, "Generative Grammar: A Report on Research," English Journal, Vol. LIV, May, 1965, pp. 408-409.

Some authorities suggest that the best way to teach students to write is to give them instruction in writing.[7] Others say that students must write frequently if they are to improve their writing, the assumption being that students will "learn to write by writing."[8] Others refute this, saying that learning to write by writing is a half-truth at best. Clarence W. Hach, for example, claims that students who wrote every day would not learn to write well if they "had no particular motivation, no well-developed sequence of writing assignments, or directed discussion of writing theory ...."[9]

If teachers are generally aware of the evidence provided by research showing that instruction in traditional and functional grammars does not improve students' language performance to any appreciable extent, this awareness has not caused them to change their classroom practices. As Groff points out, traditional grammar is still taught in spite of what research says because grammatical exercises are included in textbooks, because standard tests tend to make use of

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[7] P.G. Perrin, "Freshman Composition and the Tradition of Rhetoric," Perspectives in English: Essays to Honour W. Wilbur Hatfield, R.C. Pooley, (ed.), New York: Appleton-Century-Crofts, 1960, pp. 121-132.

[8] Donald M. Murray, "Finding Your Own Voice: Teaching Composition in an Age of Dissent," College Composition and Communication, NCTE, Vol. XX, May, 1969, p. 121.

[9] Clarence W. Hach, "Needed: A Sequential Program in Composition," Teaching English in Today's High Schools, D.L. Burton, and J.S. Simmons, (ed.), New York: Holt, Rinehart, and Winston, Inc., 1965, p. 322.

grammatical terminology, and because teachers often feel that external English examinations require that students know a great deal of grammatical terminology.[10]

The controversy as well as the confusion regarding the problems of content and instruction in written composition continues to exist. The work done by many educators and researchers demonstrates the need for further investigation into the problems of instruction in written composition. The time is long past when tradition or inertia should prevent us from searching for, and providing students with, the quality of instruction that will enable them to use their language effectively.

THE NEED FOR THE STUDY

Research has been eminently successful in causing authorities in the field of English to face the fundamental question of how to teach children to improve their verbal art. Consequently, there have been cries for a "new rhetoric."[11] In his article on "New Perspectives in Teaching Composition", Albert Kitzhaber says:

> We need to know a great deal more about the writing process and the teaching of writing. We need fifteen or twenty years of the same kind

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[10] P.J. Groff, "Is Knowledge of Parts of Speech Necessary?" English Journal, Vol. L, Sept., 1961, pp. 413-415.

[11] Edward J. Corbett, "What is Being Revived?" College Composition and Communication, 1967, p. 172.

> of intense activity by bright minds that has recently benefitted from the study of literature. We need, in short, a comprehensive modern theory of discourse.[12]

In addition, Meckel,[13] and Braddock, Lloyd-Jones, and Schoer[14] have directed attention to the need for further investigations into the kind of grammatical knowledge that may reasonably be expected to develop in students the ability to express their ideas more effectively and accurately in writing. The findings of this study may provide information on the writing process and the teaching of writing through the investigation of the relationship between instruction in the rhetoric of the sentence and its effects on the written composition of students.

Following the publication of Kitzhaber's article, numerous other articles dealing with modern theories of discourse have been published. Among these theories is the one proposed by Francis Christensen. His approach to the improvement of students' written composition is through the study of the "generative rhetoric of the sentence", and the "generative rhetoric of the paragraph." Christensen has written six essays dealing directly with style of writing. The main

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[12] Albert R. Kitzhaber, "New Perspectives in Teaching Composition," College English, Vol. XXIII, March, 1962, p. 444.

[13] H.C. Meckel, "Research on Teaching Composition and Literature," Handbook of Research in Teaching, N.L. Gage, (ed.), Chicago: Rand McNally and Co., 1963, p. 981.

[14] Richard Braddock, Richard Lloyd-Jones, and Lowell Schoer, op. cit., pp. 29-53.

concern in all these essays is with the structure of the sentence and beyond this to the structure of the paragraph.

In explicating his theory, Christensen indicates that he is aware that some research has shown no correlation between knowledge of grammar and ability to write. He argues that no one should expect a correlation where no relation has been established and made the basis of instruction. The point he makes is that there is no spontaneous relationship between grammar and composition. If students are to pass beyond the mere recognition of form to the writing of stylistically mature prose, the connection between grammatical knowledge and the improvement of their writing must be made. Christensen claims that if grammar is to have an effect on students' composition "it must be brought to bear on the rhetoric of the sentence."[15] In other words, teachers must help students to become conscious of this relationship. He agrees with Gorrell[16] that there is a workable, teachable, modern grammar. They both lament the fact that a "modern rhetoric" does not exist. And this, he observes, impinges directly on the quality of instruction in many English composition classes today. With respect to instruction in English composition, Christensen summarizes his observations as follows:

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[15] Francis Christensen, Notes Toward a New Rhetoric, New York: Harper and Row, Publishers, 1967, p. 2.

[16] Robert M. Gorrell, "Freshman Composition," Teaching Freshman Composition, Gary Tate and Edward P.J. Corbett, (ed.), New York: Oxford University Press, 1967, p. 41.

> In composition courses we do not really teach our captive charges to write better -- we merely expect them to. And we do not teach them how to write better because we do not know how to teach them to write better.[17]

Christensen thus began a search in order to accumulate evidence for new generalizations about writing, a search for a new kind of rhetoric based not on tradition but on description. He therefore studied and examined the work of contemporary writers in order to determine the ways in which they use language, and to select features of their writing significant to the purpose of description. As a result of this investigation there emerged the concept of the "Generative Rhetoric of the Sentence", the significant features of which are "addition", "direction of modification or direction of movement", "levels of generality or levels of abstraction", and "texture". A detailed examination of these features will be presented in Chapter II.

Christensen's investigation did not end at this point. He realized that unless teachers share with their students a precise vocabulary for discussing stylistic features, their analysis and study of "mature" writing will be vague and meaningless. The investigation continued, then, in order to select and name those syntactic elements which characterize mature writing.

In a paper based on "The Problem of Defining a Mature Style", delivered at the International Conference on the

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[17] Christensen, Ibid., p. 572.

Teaching of English, Christensen stated that we cannot teach composition or evaluate the composition of students without acting upon some assumptions about style.[18] He pointed out that it seems to be the aim of the schools, in teaching composition, to develop a "mature style".[19] From his study of the works of contemporary writers Christensen describes mature style in the following way:

> A mature style must say much in little, agreed, but a mature style must be easy to decode. The long clause is not the mark of a mature style but of an inept style -- the easy writing that's curst hard reading. The real problem in writing is to reconcile these two seeming opposites -- to pack much in little, but to pack it in so that it can be readily unpacked. It can be done. A mature style is one that does it. It can be taught. But we can learn how to teach it only by learning how professional writers do it. We must set our sights from the beginning on the practice of professional writers.[20]

From his study and analysis of the practice of professional writers Christensen concludes that a mature style will have: (1) a relatively high frequency of free modifiers, especially in the final position, and (2) a high frequency

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[18] Francis Christensen, "The Problem of Defining a Mature Style," English Journal, Vol. LVII, No. 4, April, 1968, p. 572.

[19] Christensen, Ibid., p. 572.

[20] Christensen, Ibid., p. 576.

of structures of coordination within the T-unit -- what might be called intra-T-unit coordination.[21] These syntactic structures, the free modifiers, comprise the workable, teachable, modern rhetoric that Christensen advocates for developing stylistically mature modern prose writers. His objective is to teach students to write clearly, accurately, and effectively.

Christensen's belief that there is a workable, teachable body of knowledge which could improve the written composition of students in our schools is reflected in the Alberta Junior High School Curriculum Guide for Language Arts. In a general statement of its objectives for the language program the Curriculum Guide states:

> The basic function of language is to communicate ideas and feelings.... The desired end is that students will be aware of, and will be enthusiastic about their use of language in thinking and in conveying ideas clearly, accurately, and fluently.[22]

In a statement of the specific objectives of the writing program the Alberta Curriculum Guide lists:

> 1. The achievement of form and order in the expression of ideas.
> 2. The achievement of clear, varied, lively, and appropriate sentences.[23]

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[21] Christensen, Ibid., p. 579.

[22] Junior High School Curriculum Guide for Language Arts, Department of Education, Edmonton, Alberta, 1969, p. 5.

[23] Ibid., p. 5.

To accomplish these ends the Guide emphasizes practice in writing one-paragraph compositions using three modes of writing -- description, narration, and exposition.[24] The Guide further suggests that grammar should be studied as a part of the attempt to improve students' written expression. An attempt has been made to structure most of the study of grammar in grades seven and eight. The belief is that a meaningful study of the elements of language and of sentence structure may provide students "with a set of terms and concepts that will help them to discuss their writing with greater economy and preciseness, and, perhaps, permit more efficient revision of their written work."[25]

While the Curriculum Guide merely cites reference texts and suggests the same general traditional formulae for helping students become effective writers, Christensen specifies the syntactic structures in which students must be instructed and also suggests the kind of instruction which will effect the transition from the study of those structures to the students' writing.

In view of the inadequacy of the Curriculum Guide in providing teachers of composition with a teaching rhetoric -- one that describes the choices available to the writer and at the same time explains the effects or results of these

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[24] Ibid., p. 6.

[25] Ibid., p. 9.

choices, and in view of the claims made by Francis Christensen, it seems that investigation into the effects of his theory of the "Generative Rhetoric of the Sentence" on students' written composition is necessary, and should be undertaken. As Nathan Blount states,

> ... the teaching of composition, language, and literature needs more experimentation.... Only through experimentation will we ever secure a more complete understanding of the processes and the conditions involved in the efficient acquisition, retention and use of the concepts and cognitive skills which comprise one of the major outcomes of learning in English.[26]

STATEMENT OF THE PROBLEM

The study is designed to answer the following question:

Will grade seven, eight, and nine students who receive instruction in the features of Francis Christensen's "rhetoric of the sentence" write more stylistically mature prose than students in grades seven, eight, and nine who receive instruction in the principles of writing through traditional grammar?

PURPOSES OF THE STUDY

The purposes of the study are as follows:

(1) To investigate the differential effects of instruction in the rhetoric of the sentence on students of different

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[26]Nathan S. Blount, "Summary of Investigations Relating to the Language Arts in Secondary Education: 1966," English Journal, Vol. LVI, No. 5, May, 1967, p. 694.

ability levels (high, mid, and low) in grades seven, eight, and nine.

(2) To determine to what extent students of different ability levels in grades seven, eight, and nine are able to use the grammatical features of the rhetoric of the sentence in specific writing situations.

(3) To determine at what grade level(s) and ability level(s) the grammatical features of the rhetoric of the sentence can be taught most effectively.

(4) To determine the effects, if any, of instruction in the rhetoric of the sentence on the written composition of students of different ability levels in grades seven, eight, and nine.

HYPOTHESES

Relative to the above purposes the following hypotheses were formulated. All the hypotheses were subjected to an analysis by grade level and ability level.

(1) Students in the experimental groups in grades seven, eight, and nine will achieve significantly higher scores on: (a) the Post Written Expressional Test, its subtests, and (b) the Post Written Composition Test, than will students in the control groups at the same grade levels.

(2) Students in the experimental groups in grades seven, eight, and nine will use a significantly higher frequency of "free modifiers" in: (a) the Post Written Composition Test,

and (b) the Post Written Expressional Test, than will students in the control groups at the same grade levels.

(3) Students in the experimental groups in grades seven, eight, and nine will use a significantly higher frequency of "free noun phrases" in: (a) the Post Written Composition Test, and (b) the Post Written Expressional Test, than will students in the control groups at the same grade levels.

(4) Students in the experimental groups in grades seven, eight, and nine will use a significantly higher frequency of "free adjective phrases" in: (a) the Post Written Composition Test, and (b) the Post Written Expressional Test, than will students in the control groups at the same grade levels.

(5) Students in the experimental groups in grades seven, eight, and nine will use a significantly higher frequency of "free absolute phrases" in: (a) the Post Written Composition Test, and (b) the Post Written Expressional Test, than will students in the control groups at the same grade levels.

(6) Students in the experimental groups in grades seven, eight, and nine will use a significantly higher frequency of "free prepositional phrases" in: (a) the Post Written Composition Test, and (b) the Post Written Expressional Test, than will students in the control groups at the same grade levels.

(7) Students in the experimental groups in grades seven, eight, and nine will use a significantly higher frequency of "verb phrases" in: (a) the Post Written Composition Test, and

(b) the Post Written Expressional Test, than will students in the control groups at the same grade levels.

(8) Students in the experimental groups in grades seven, eight, and nine will use a significantly higher frequency of "long T-units" in the Post Written Composition Test than will students in the control group at the same grade levels.

(9) Students in the experimental groups in grades seven, eight, and nine will use a significantly higher frequency of "short base clauses" in the Post Written Composition Test than will students in the control groups at the same grade levels.

(10) Students in the experimental groups in grades seven, eight, and nine will use a significantly higher frequency of "intra-T-unit coordination" structures in: (a) the Post Written Composition Test, and (b) the Post Written Expressional Test, than will students in the control groups at the same grade levels.

(11) Students in the experimental groups in grades seven, eight, and nine will demonstrate a more "mature style" of writing in: (a) the Post Written Composition Test, and (b) the Post Written Expressional Test than will students in the control groups at the same grade levels.

LIMITATIONS OF THE STUDY

(1) The investigation is limited by the fact that the sample used in the study was from one junior high school in Edmonton, Alberta.

(2) A major limitation of this study is the short duration of instruction given to students in the experimental and control groups. Six weeks of instruction may not result in significant improvements in students' written composition.

(3) Another limitation is probably inherent in the criterion measures which the investigator constructed. The Written Expressional Test is not a standardized test. Therefore, the usual problems of validity and reliability constitute a limitation. The Written Composition Test requires students to write stylistically mature prose in a first draft. Under normal conditions, the writer is able to revise, reorganize, and rewrite the initial draft in order to present his most effective writing. However, the investigator assumes that the samples to be used in this study will provide a valid measure of students' writing under test conditions. The investigator does not claim these tests to be ultimate criterion measures.

Inferences drawn from the study concerning instruction in written composition, must, therefore be applied with caution to situations beyond these limits.

DEFINITION OF TERMS

(1) The term "rhetoric of the sentence" is used in this study to refer to those features of contemporary prose -- addition, direction of movement, levels of generality, and texture -- and the syntactic structures, prepositional phrases

or clusters, noun, verb, adjective and adverb phrases or clusters, and verbid clauses or absolutes, which the student may use creatively to generate sentences and paragraphs to suit best his own purpose in informing, persuading, or moving his reader.

(2) The term "bound modifiers" is used in this study to refer to word modifiers which are close, or limiting, or restrictive modifiers.

Example: The convict was a nervous man.
Everyone who owns a dog must buy a license.

(3) The term "free modifiers" is used in this study to refer to modifiers of constructions from which they are set off by junctures or punctuation. Grammatically, they are loose, or additive, or non-restrictive. The constructions used are prepositional phrases; relative and subordinate clauses; noun, verb, adjective and adverbial phrases or clusters; appositives; and verbid clauses or absolutes.

Example: The boys ate warily, trying not to be seen or heard, the cornbread sticking, the buttermilk gurgling, as it went down their gullets. - K.A. Porter

(4) The term "T-unit" is used in this study to refer to each main, or independent clause, together with its subordinate elements.

Example: She walked slowly, picking her way as though she were afraid she would fall. - Steinbeck

(The T-unit includes all the words (14) in the sentence.)

(5) The term "base clause" is used in this study to refer to what is left when the free modifiers are subtracted. The

"base clause" may or may not have bound subordinate clauses.

Example: He was forty, a short thickset man with a wealth of stiff, black hair, straight back without a parting, like a Slav bicyclist. - John Updike

(6) The term "mature style" has been used by Christensen to refer to that style of writing used by writers who have become famous as men who could use language effectively to convey moods, feelings, impressions, and imagery.

Christensen defines "mature style" syntactically, as writing which has a relatively high frequency of free modifiers, especially in the final position; a high frequency of free noun, verb, adjective, and prepositional phrases; a high frequency of long T-units with "short base clauses"; a high frequency of verbid clauses or absolutes; and a high frequency of intra-T-unit coordination structures.

(7) The term Written Expressional Test (WET) refers to one of the criterion measures used in this study. The WET is composed of five subtests. Each subtest deals with specific syntactic structures in Christensen's rhetoric of the sentence and with sentence building and expansion through modification, coordination, and subordination. For further details, see pages 92 to 94.

(8) The term Written Composition Test (WCT) refers to the second criterion measure used in this study.

(a) The WCT asks students to submit one sample of each of three modes of writing: description, narration, and exposition.

(b) The WCT score is the sum of three independent judgments (made by three qualified English teachers) on each of the three modes of writing. Thus, the combined scores of the three judges constitute a measure of the student's writing performance. For further details see pages 115 to 117.

(9) The terms high, mid, and low designate the ability groups referred to in this study. Students were assigned to one of these groups on the basis of their I.Q. scores obtained on the Lorge-Thorndike Intelligence Test (Level 4, Form A, Verbal Battery).

(10) The terms high, mid, and low ability subgroups refer to subgroups of students drawn from the sample and used for comparisons involving the WCT.

ORGANIZATION OF THE STUDY

The remainder of the study is organized in the following way:

Chapter II. Review of Related Literature. This chapter contains a report on the present status of written composition and a presentation of the criticism of the content and instruction in written composition. This chapter also examines some of the reasons for the rise of the new rhetoric, and presents a description of the major features of the new rhetoric, a description of the features of the rhetoric of the sentence, and a review of suggestions for the study and

analysis of models of writing in composition classes. In addition, this chapter outlines some of the methods of analyzing style in writing, and reviews some of the related studies dealing with the development and analysis of style in students' writing.

Chapter III. The Design of the Study. This chapter presents a description of the nature of the sample, a description of the selection criterion, and the procedures used for selecting the ability groups from the sample. This chapter also contains an explanation of the instructional procedures for the experimental and control groups, a presentation of the data dealing with the selection of teachers for the study, a description of the procedures used in constructing the criterion measures, a description of the procedures used in scoring the WET and the WCT, and a description of the criteria used for making the frequency counts on the WET and the WCT. In addition, the validation and reliability of the WET and a summary of the pilot study are reported.

Chapter IV. Analysis of the Data: Results and Interpretation. This chapter presents the analysis and the interpretation of students' achievement on the WET and the WCT by grade level and ability level.

Chapter V. Summary, Conclusions, and Suggestions for

Further Research. This concluding chapter contains a summary of the main findings together with certain implications for teachers of composition and suggestions for further investigations.

CHAPTER II

REVIEW OF RELATED LITERATURE

INTRODUCTION

Chapter II contains a report on the present status of written composition and a presentation of the criticism of the content and instruction in written composition. This chapter also examines some of the reasons for the rise of the new rhetoric, presents a description of the major features of the new rhetoric, a description of the features of the rhetoric of the sentence, and a review of suggestions for the study and analysis of models of writing in composition classes. In addition, this chapter outlines some of the methods of analyzing style in writing, and reviews some of the related studies dealing with the development and analysis of style in students' writing.

THE PRESENT STATUS OF WRITTEN COMPOSITION

Written composition skills must be taught effectively and efficiently at all levels of instruction so that students may develop increased proficiency in using their language. Although most curricula in schools on this continent include written composition as a subject of instruction, current research studies and other professional publications provide ample evidence that very little improvement has been made in

the past decade in increasing students' competence in written composition, in the quality of instruction provided in composition classes, and in the subject matter taught in these composition classes.

The growing concern among authorities in English, among teachers, and the public in general, for improved curricula, instruction, and content in English composition courses has resulted in various studies and surveys, especially in the area of the language arts. One of these surveys, conducted by Joseph Mersand in the United States, attempted, among other things, to investigate the attitude of the public toward English teaching. Mersand secured relevant information from affiliates of the National Council of Teachers of English, Heads of State Education Departments, college presidents, magazine editors, business executives, and other groups and individuals who were familiar with either the nature of English teaching, or the competence in English of high school and college graduates of the last five or ten years. Mersand claimed that the responses reported in his study were the considered opinions of highly educated and successful persons in their chosen fields, and hence deserve serious consideration.[27] Excerpts from this survey are presented in the following paragraphs.

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[27] Joseph Mersand, Attitudes Toward English Teaching, New York: Chilton Co. Book Division, 1961, p. 46.

Although a few of the respondents felt that there was some improvement in the reading and writing skills of students entering university, most of them were extremely severe in their criticism of the students' competence in English. The respondents felt that students entering university had little competence in handling the content in the language arts, and that this competence had, in fact, deteriorated in recent years. The severest criticism of students entering university came from Louis L. Martz, Chairman, and Frederick W. Hilles, former chairman, of the Department of English at Yale University, who said:

> ... students at Yale now have higher aptitudes ..., but in fact they are less competent to write an effective composition than were the students of ten years ago. There is a grave weakness in their powers of analysis and organization, even the brightest students show that they lack basic training in the ways of beginning, developing, and concluding an argument or exposition.[28]

This observation is supported by Dean J. Stephen Bloore of Fairleigh Dickinson University, whose response indicated that most high school students did practically no writing. Bloore felt that because of poor high school training, freshmen entering university were inadequately prepared to cope with the curriculum in English. In fact, he stated, "I must say categorically that the English preparation of entering students, far from improving, gets progressively worse."[29]

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[28] Ibid., pp. 48-49.

[29] Ibid., p. 46.

Dr. Clark of the American University presented a more dismal picture of the students entering university in the following statement:

> ... there is no sense of responsibility about language, no recognition of the power of words, merely a vague groping accompanied by the hope that the reader or hearer will 'get what I mean'. More specifically, it is apparent that most students arrive at college with little or no training in writing, and in many cases without the basic knowledge of what a sentence is or what a paragraph is. Even such elementary matters as spelling and punctuation seem to have been neglected and the poverty of words suggest that little emphasis has been placed on vocabulary-building or the attentive reading that can help build a vocabulary.[30]

It is rather discouraging to note that magazine editors and business executives presented the same kind of criticism regarding the competence of high school and college graduates in English. John Fischer of Harper's Magazine, expressed the view that "high school graduates cannot write a decent paragraph."[31] Marjorie L. Burns, copy editor of Cosmopolitan, levelled the most pointed criticism on the ability of high school graduates to deal effectively with the most elementary problems in writing. She stated:

> They don't know the parts of speech; they don't know the correct use of the semi-colon and the simple quotation mark; they confuse 'imply' and 'infer'; they have never heard of the dangling participle. They edit a manuscript intuitively, 'just fixing it up so it sounds right'. The result is that the employer who

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[30] Ibid., p. 49.

[31] Ibid., p. 110.

> wants to turn out work worth paying for must first turn teacher and instruct them in the niceties.[32]

Such criticism is by no means limited to professional people. The president of a major manufacturing firm expressed his concern about the inability of high school and college graduates to use their language effectively. "Too often", he said, "young people are handicapped by an inability to express themselves, either orally or in writing. Vocabularies are limited and many young people are uncomfortable in the use and understanding of their own language."[33] A similar concern was expressed by an insurance company director who claimed that skill in communications is a necessary requirement in business. His view was that,

> ... the most noticeable deficiencies have been in simple grammar and rhetoric. The words are there in abundance, but they are not put together logically and are not arranged in a manner conducive to rapid and clear comprehension.[34]

Clearly, these criticisms point to certain weaknesses in the English curriculum, in general, and to many deficiencies in the written composition program, in particular. Almost twelve years ago, Hart, Slack, and Woodruff, Jr. stated:

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[32] Ibid., p. 110.

[33] Ibid., p. 71.

[34] Ibid., p. 78.

> ... the entering freshman needs desperately to learn to write. He lacks grammatical sense; he has barely a nodding acquaintance with the fundamental decencies of writing; most appalling, he lacks ability to compose - to find workable subjects, to give them substance and form to communicate them effectively to a reader.[35]

These observations are still relevant today because authorities in English, teachers of English, and the general public, continue to express concern about the inability of high school and college graduates to deal effectively with their language. It is encouraging to note, however, that in the latter part of the 1960's, much time and energy have been devoted to the examination and evaluation of the content, and the quality of instruction in composition classes, with a view to improving them.

CRITICISM OF THE CONTENT AND INSTRUCTION IN COMPOSITION CLASSES

In general, the criticisms levelled at high school and college graduates in English, have led to a more intensive examination and evaluation of the content and instruction in composition classes from kindergarten through to the college level. The feeling is that if high school and college graduates have not developed the ability to use

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[35] John A. Hart, Robert C. Slack, and Neal Woodruff, Jr., "Literature in the Composition Course," College Composition and Communication, Vol. IX, Dec., 1958, pp. 236-241.

their language effectively in writing, it is possible that English teachers are still not doing enough in their composition classes, are still not devoting an adequate proportion of time to work on those aspects of grammar which may assist students in selecting appropriate syntactic structures for expressing their thoughts, or perhaps they are doing quite the wrong things in their composition classes.[36]

Authorities in English, today, have expressed much dissatisfaction with what has been accepted, and what is still being accepted as relevant subject matter, and sound teaching practices in composition classes. Kitzhaber points out that the content of many composition classes is still based on innumerable combinations of traditional grammar drill and on sentence diagramming. More specifically, he says, that class time is more often spent

> ... drilling on the elements of correct usage, especially spelling and punctuation, and simple matters of sentence form and paragraphing structure, or vapouring about anthology selections ... this on the curious theory that such discussions are the best way to give students something to write about.[37]

Braddock, Gibson, Hogan, Gorrell, and others have also lamented the fact that irreplaceable hours are spent on the same kinds of futile exercises. They claim that

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[36] Ronald Wardhaugh, "An Investigation of Certain Uses of a Test Constructed According to Principles of Transformational Grammar." Unpublished Doctoral dissertation, University of Alberta, 1964, p. 3.

[37] Albert Kitzhaber, "4C, Freshman English, and the Future," College Composition and Communication, Vol. 14, 1963, p. 130.

> In many schools and in some high school honours courses, students write frequently, but have little or no organized program of instruction in composition. Numerous other schools teach a few formulas for writing paragraphs, focus attention heavily on achieving mechanical correctness and, with the mistaken notion that it will improve sentence structure, on reviewing the concepts of traditional grammar.[38]

Perhaps the most devastating criticism of current composition courses comes from Virginia M. Burke, who says:

> There is chaos today in the teaching of composition because since the turn of the century composition has lacked an informing discipline, without which no field can maintain its proper dimensions, the balance and proportion of its various parts to its very integrity. Consequently, the practice of composition has shrunk, has lost important elements, has become a victim of all manner of distortion.[39]

If composition courses are in fact based upon questionable subject matter, as the above authorities suggest, or if these courses lack the content necessary to improve the competence of students in using their language, it follows that the quality of instruction in composition classes will also be questionable. Some authorities suggest that very often the wrong kind of activity goes on in the English classroom under the head of composition instruction.[40] The

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[38] Richard Braddock, Walker Gibson, Patrick Hogan, Robert Gorrell, et al., "The Status of Freshman Composition," College Composition and Communication, Vol. XXIX, 1968, p. 81.

[39] Virginia M. Burke, "The Composition-Rhetoric Pyramid," College Composition and Communication, Vol. XVI, 1965, p. 4.

[40] Albert Kitzhaber, "English Composition, The Hardest Subject," University of Kansas Bulletin of Education, Oct., 1964, p. 118.

activities referred to are diagramming and parsing. Macrorie claims that

> ... composition has failed miserably to improve the writing of college students over the past century partly because ... too many composition teachers have used the Errors Approach in a pitiable attempt to show their superiority to their young charges.[41]

Such criticisms are by no means limited to isolated individuals. The National Study of High School English Programs conducted by Squire and Applebee reports on the present condition of English instruction in 158 high schools in 45 states in the United States. The high schools were selected largely for their reputation in English. The data presented in the study were obtained through classroom observations, individual interviews, group meetings with teachers and students, and the use of specially designed questionnaires and checklists. After analyzing the data on the teaching of composition, Squire and Applebee concluded that "the most discouraging conclusion which the project staff reached concerning instruction in writing is that there is simply very little of it."[42] They further observe that instruction in written composition consists of having students write essays followed by teacher comment and the subsequent return of essays -- in many cases

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[41] Ken Macrorie, Review Section, College Composition and Communication, Vol. XIV, 1963, p. 270.

[42] James R. Squire, and R.K. Applebee, High School English Instruction Today, New York: Appleton-Century-Crofts, 1968, p. 121.

to be read by students and revised. They deplore this time-honored system of instruction saying that "the results of these efforts is, at best, a fragmentary approach to the writing process."[43] The report further states that the project staff found little or no thought given to how a student's writing ability can be improved.[44] This observation is supported by Rodgers[45] and Fenner,[46] who point out that both composition and speech have suffered serious setbacks in the English curriculum, that instruction in written composition has degenerated into a "purposeless expository fad" and that the actual teaching of composition is in reality undertaken either very seldom or very poorly.

The lack of relevant instruction, or the inexpert teaching which is done in many composition classes, can be attributed to the training teachers receive in composition in their preparatory programs. Squire and Applebee state,

> ... when teachers were asked to indicate on questionnaires the aspect of English in which they felt most deficient, composition outranked all others (including literature, language, reading, and speech) by a considerable margin.[47]

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[43] Ibid., p. 122.

[44] Ibid., p. 130.

[45] Mary C. Rodgers, New Designs in Teaching English, Scranton, Penn.: International Textbook Co., 1968, p. 130.

[46] James L. Fenner, "Can Average Students Write?" English Journal, Vol. LVI, 1967, No. 5, 1967, p. 726.

[47] Squire and Applebee, op. cit., pp. 136-137.

It is possible that this deficiency has caused a large number of teachers to rely heavily on various texts for content in composition. A study conducted by Evans and Lynch[48] on composition-grammar textbooks reveals a surprisingly small amount of attention given to writing in the composition texts, but considerable attention is given to grammar, usage, and mechanics. There is an interesting parallel between the proportion of emphasis given to composition and rhetoric in this study and the emphasis on instruction in composition in Squire and Applebee's study. It is possible that the lack of classroom instruction in writing is a reflection of the lack of emphasis given to it in textbooks. "Similarly," Squire and Applebee say, "the whole mode of teacher correction mirrors the rationale implied in the textbooks: about two thirds to the problems of grammar-mechanics-usage and a much less significant proportion to the rhetoric, the development and organization of writing."[49] If composition textbooks are characterized by overall excellence, one can assume that the content presented to students will be of a reasonably high quality. But this is not the case. Kitzhaber points out that one of the sources of weaknesses of many composition courses is to be found in the texts. He says:

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[48] James J. Lynch, and Bertrand Evans, High School English Textbooks: A Critical Appraisal, Boston, Mass.: Little, Brown, and Co., 1963.

[49] Squire and Applebee, op. cit., p. 128.

> As a class, the language and composition textbooks used in the public schools are pretty feeble instruments for intellectual development. As a rule, they are poorly written - condescending, chaotically organized, cluttered with cartoons and colours and photographs and fancy type. They contain a vast amount of irrelevant material - .... The content of these books, the legitimate content dealing with language and rhetoric - is nearly always out-of-date and unrealistic. The rhetorical theory is dull and repetitive .... As for language ... the majority of those (texts) now being used reflect a view of language that largely ignores all the research done in the field during the last three-quarters of a century at least.[50]

There is overwhelming evidence showing that although there is considerable writing activity in the schools, very little effort is devoted to actual instruction in writing, and that when teaching does take place, it is inexpert teaching.

Francis Christensen says that "we do not teach them (students) how to write better because we do not know how to teach them to write better."[51] But he proposes a theory of "the rhetoric of the sentence", a modern rhetoric designed to instruct students in their verbal art. Like Christensen, other authorities also believe that instruction in composition skills can be of value in increasing the students' proficiency in writing.[52] Rodgers not only agrees with this view but goes on to say that such instruction must include the useful parts

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[50] Kitzhaber, "English Composition: The Hardest Subject," p. 115.

[51] Christensen, Notes Toward a New Rhetoric, p. 3.

[52] Walter D. Loban, The Language of Elementary School Children, Champaign, Illinois: NCTE Research Report No. 1, 1963, p. 88.

of grammar which should be taught as enriching information, and which should be "related to the students' urgent need to write composition effectively."[53] Milic summarizes the present concern for finding a new method of teaching students how to manipulate their language by saying:

> If we want to teach our students something in our composition classes we must return to some form of rhetoric ... an awareness must be instilled of the existence of alternatives, of different ways of saying the same thing, of the options the language offers.[54]

The current interest in searching for a new theory of discourse is evidenced in the publication of books devoted in whole or in part to the "new rhetoric", and in numerous articles in professional journals and magazines explicating the areas of study that are being revived and reorganized. Some of the modern rhetoricians are concerned with the development of objective principles of writing. To this end, they are examining representative samples of writing, testing them against traditional principles, and making further generalizations about writing. The hope is that through the analysis of adequate samples investigators will provide valuable information concerning the kind of instruction needed to develop in students the ability to write in a mature style.

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[53] Rodgers, op. cit., p. 117.

[54] Louis T. Milic, "Theories of Style and Their Implications for the Teaching of Composition," Teaching Freshman Composition, Gary Tate, and E.P.J. Corbett, (ed.), New York: Oxford University Press, 1967, p. 260.

REASONS FOR THE RISE OF THE NEW RHETORIC

The rise of the new rhetoric could be viewed as the result of many generative forces at work. The criticisms levelled against high school and college graduates, the growing realization of the large amount of inexpert teaching in composition classes, the unrealistic preparation provided to equip people to teach composition, the ineffectiveness of earlier instruction in schools and colleges, and a growing public agitation for better work in English, have all contributed to the increased interest in the new rhetoric. But these are only some of the causes. There are others, more subtle, which continue to generate interest in the new rhetoric.

The revival of interest in the old rhetoric has had considerable impact on the development of the new rhetoric. Recent publications by Corbett[55], and Bailey[56] suggest that classical rhetoric has value beyond its historic interest, and that it can still be the basis for a working approach.

The impact of new knowledge or new techniques in related disciplines -- especially in linguistics has given added impetus to the rise of the new rhetoric. Gorrell[57],

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[55] Edward P.J. Corbett, Classical Rhetoric for the Modern Student, New York: Oxford University Press, 1965.

[56] Dudley Bailey, "A Plea for a Modern Set of Tropoi," College English, Vol. XXVI, 1964, pp. 111-117.

[57] Robert M. Gorrell, "Very Like a Whale - A Report on Rhetoric," College Composition and Communication, Vol. XVI, No. 3, 1965, p. 140.

and Chomsky[58] state that current discussions of transformational grammars take an essentially rhetorical attitude in their emphasis on the processes which generate sentences. In fact, structural and generative grammars have enabled Richard Ohmann[59] and Francis Christensen[60] to develop different approaches to rhetorical analysis. Utley[61] suggests that general semantics, the new criticism, and linguistic research, have all been moving forces in the current interest in the new rhetoric. It is interesting to note that these new rhetoricians seem to have a common purpose -- that is, to create a rhetoric compatible with modern linguistics. As Gorrell suggests, modern rhetoricians "are likely to place more emphasis on the rhetoric of the sentence, that is, for example, on distinguishing among various kinds of sentence patterns and evaluating their general effectiveness."[62]

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[58] Noam Chomsky, "Current Issues on Linguistic Theory," The Structure of English, J.A. Fodor, and J.J. Katz, (ed.), New Jersey: 1964, pp. 50-118.

[59] Richard Ohmann, "Prolegomena to the Analysis of Prose Style," Style in Prose Fiction: English Institute Essays, Harold C. Martin, (ed.), New York: Columbia University Press, 1958.

[60] Francis Christensen, "The Problem of Defining a Mature Style," English Journal, April, 1968, pp. 572-579.

[61] Francis Lee Utley, "The Boundaries of Language and Rhetoric: The English Curriculum," College Composition and Communication, Vol. XIX, No. 2, 1968, p. 118.

[62] Gorrell, "Freshman Composition," Teaching Freshman Composition, p. 34.

Finally, modern rhetoricians believe that it is both possible and desirable to teach composition in an intellectually responsible way. Such a task demands agreement on the aims of the composition course and on its content. The proponents of the new rhetoric are optimistic about the future, and this optimism is manifested in the statement made by Kitzhaber: "We can surely come to a closer agreement on the aims of this course, and on a defensible content for it than the existing chaos would suggest."[63]

Clearly, the new rhetoricians seem united in their efforts to construct a theory of rhetoric suited to today's needs -- a flexible theory as the informing discipline for instruction in composition classes. These rhetoricians are attempting to create a workable, teachable rhetoric -- a rhetoric which takes full advantage of knowledge obtained from related disciplines.

THE NEW RHETORIC

The growing enthusiasm for the "new rhetoric" is viewed by Gorrell as "a welcome antidote for the old sterility."[64] But even at this early stage in its growth, writers have proposed various points of emphasis to be studied in

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[63] Kitzhaber, "4C, Freshman English, and the Future," College Composition and Communication, p. 131.

[64] Robert M. Gorrell, Rhetoric: Theories for Application, Champaign, Illinois: NCTE, 1967, p. 1.

composition classes. As Gorrell suggests, "The problem is to develop both theory and pedagogy without confusing them ...."[65] Consequently, it is necessary to determine what theory of the new rhetoric, or what parts of it best suit the purposes of this study.

Ulanov[66] states that the primary purpose of rhetoric in ancient days was to teach the art of speaking well, but today, speaking, reading, and writing occupy separate places in the language arts curriculum, and only rarely are they brought together. Consequently, two of the five parts of classical rhetoric, Memory and Delivery, are removed from instruction in modern rhetoric. The remaining parts -- Invention, Arrangement, and Style -- "follow so logical an order, and the kind of analysis and synthesis to which they lead is so unmistakably useful, that rhetoric once again ... can justify a high place for itself in the high school and college curriculum."[67]

For Ulanov, the logic of the classical rhetorical arrangement is indisputable. He claims that every piece of writing starts with something like "Invention". That is, the writer must choose or devise a subject for himself, or

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[65] Gorrell, "Very Like A Whale - A Report on Rhetoric," College Composition and Communication, p. 141.

[66] Barry Ulanov, "The Relevance of Rhetoric," Rhetoric and School Programs, Champaign, Illinois: NCTE, 1966, pp. 1-6.

[67] Ibid., p. 2.

he must invent some unique way of dealing with an assigned topic. Invention is not simply a matter of choosing a subject. Rather, it involves the choice of a subject for which a convincing case could be made. After Invention comes "Arrangement". Ulanov says that in the ancient sense, arrangement is an exercise in order. In this sense, arrangement does not concern itself "with choice of words nor with any of the other minutiae of self-expression."[68] It is the rational sequence of presentation which depends to a large extent on the initial structuring of purpose. "Style", says Ulanov, "is the most elusive of the parts of the rhetorical art."[69] It is in the area of style that the elements of grammar, and syntax, and figurative language become of critical importance in rhetoric. It is at this point, Ulanov says, that "we must somehow guide our students to find appropriate terms for their experiences, appropriate punctuation, appropriate colours and textures, appropriate diction, and having found them to recognize them."[70] Thus, Ulanov argues for a kind of enlightened instruction which will emphasize these rhetorical elements, since they remain central to all writing.

Wayne Booth says that when the student has found a

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[68] Ibid., p. 3.

[69] Ibid., p. 3.

[70] Ibid., p. 3-4.

definition of his audience, his argument and his own tone of voice, then can he write effectively.[71] Booth suggests that before a course in writing is reorganized, the ingredients which are common to good writing and good writing instruction should be discovered. These ingredients, Booth states, might serve as guidelines for the development of varied writing programs. He claims that the common ingredient he has found in the writing he admires is the

> ... rhetorical stance, a stance which depends on discovering and maintaining in any writing situations proper balance among the three elements that are at work in any communicative effort: the available arguments about the subject itself; the interests and peculiarities of the audience, and the voice, the implied character, of the speaker ... it is this balance, this rhetorical stance, difficult as it is to describe, that is our main goal as teachers of rhetoric.[72]

Booth further suggests how the "rhetorical stance" of subject, audience, and speaker may lose its balance: we fall into the pedant's stance when we are concerned with the subject to the exclusion of the audience and the purpose; into the advertiser's stance when the speaker overemphasizes the effect to the exclusion of the subject.[73] Booth concludes, however, by saying that the attempt to achieve a balance among the

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[71] Wayne Booth, "The Rhetorical Stance," Toward A New Rhetoric, Papers from the 1963 Conference on College Composition and Communication, 1963, p. 3.

[72] Ibid., p. 3.

[73] Ibid., pp. 3-6.

subject, the audience, and the speaker is not the only thing that must be taught under the heading of rhetoric.

McCrimmon,[74] and Steinberg[75] also stress the importance of the subject, the audience, and the speaker. They say that the writer must make a deliberate attempt to influence an audience about material that is meaningful to him. In other words, the writer must attempt to discover at the beginning of the process what he wants to do with his subject for a particular audience. "To the extent that he succeeds in this effort," says McCrimmon, "he establishes implicit guidelines which help him to control the selection and organization of his material and his manner of presenting that material."[76]

Whatever changes have taken place in rhetoric, old or new, it has remained essentially an art of communication, an art governing the interlocking relationships between the discourse, the speaker or writer, and the audience. And as such, rhetoric has fairly consistently been regarded as an art governing the choice of strategies that a speaker or writer must make in order to communicate most effectively with an audience.[77]

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[74] James A. McCrimmon, "Will the New Rhetoric Produce New Emphases in the Composition Class?" College Composition and Communication, Vol. XX, 1969, pp. 124-125.

[75] Erwin R. Steinberg, "Some Basic Assumptions for Courses in English Composition," College Composition and Communication, Vol. II, October, 1951, pp. 11-16.

[76] McCrimmon, op. cit., p. 125.

[77] Edward P.J. Corbett, "What Is Being Revived?" College Composition and Communication, Vol. XXVIII, No. 3, October, 1967, p. 166.

But this is only a part of the new rhetoric. Many rhetoricians are more concerned with finding more direct and efficient ways of teaching students, and indeed, all men, their language effectively -- a concern which grapples with the question of where rhetoric and language bear directly upon each other. Some of these rhetoricians more or less consciously emphasize certain rhetorical features, the more visible stylistic resources provided by the language; some emphasize the style emerging from the tension between the state of the language the writer uses, and the demands of his individuality striving to express itself; while many share the belief that grammar can be effective in providing a range of things it is possible to do with language, and that rhetoric can show the student unlimited choices among permitted alternatives. The rhetoricians are attempting to create a teaching rhetoric -- a rhetoric that must describe the choices available to the writer, which must explain the results or effects of different choices, and which must provide the writer with a basis for choosing, so that he can develop a more mature style of communicating his thoughts.[78]

There has been agreement that mature writing must say something and the ideas must be organized to show some progression.[79] Sentences must conform in structure to the

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[78] Gorrell, "Very Lake A Whale - A Report on Rhetoric," College Composition and Communication, p. 142.

[79] Christensen, Notes Toward A New Rhetoric, p. 4.

patterns of language -- that is, the sentences must be grammatical.[80] The student must be free to choose the ways in which a sentence, a phrase, a clause, or any other structured device enables him to convey the intended meaning.[81] The choice of one or more of these options differentiates between the mature and immature style.[82] A mature style, therefore, operates within the framework of a grammar. If instruction in composition is to produce a mature style, it would be necessary to select out of a wider stock of available devices, and to work them all into an appropriate, pleasing, over-all pattern.[83] Thus, in order to understand and control his language, the student

> ... must know the options. The wider his repertoire and the deeper his understanding of the peculiarities of each, the better he is equipped to write. He must see how patterning can be effective within these options over wide structures .... We would hope to bring him to a point where he easily and almost unconsciously chooses well in most situations. But we would like to provide him with the means to work it out carefully and laboriously when in a tight spot. As in teaching a foreign language, the

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[80] Jean Malmstrom, "The Workshop in Generative Grammar," Reports on the Conference on College Composition and Communication, 1962, p. 30.

[81] Gorrell, Rhetoric: Theories for Application, p. 3.

[82] James Sledd, "On Not Teaching English Usage," English Journal, Vol. XIV, November, 1965, p. 689.

[83] H.A. Gleason, Jr., "What Is English?" Linguistics, Composing, and Verbal Learning, Chicago: Report on the 1962 Conference on College Composition and Communication, 1962, p. 4.

> accurate causal control of patterns comes out specific patterned drill and conscious manipulations.[84]

Thus of utmost importance is what students are expected to learn and to apply. Davidson maintains that

> we cannot ... teach skill in composition unless we can contrive to end the sad divorce of grammar and rhetoric that is the root of our teaching trouble. We need a method of teaching that will bring grammar and rhetoric together.[85]

Gorrell suggests that one of the subjects to be selected as especially pertinent for a course in composition is grammar. "Today," he says, "any comprehensive theory of rhetoric would have to incorporate the findings of generative grammars ...."[86] Gorrell believes that the modern grammarian can provide, for the purposes of teaching, information on the effects of various patterns, the relationships the device reveals, and the purposes for which the device can be used by the writer.[87]

Perhaps the most cogent expression of the need and value of grammar in the new rhetoric is presented by Josephine Miles. She says:

> Grammar gives us the articulations of language with which we can compose. And they are not

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[84] Ibid., pp. 5-6.

[85] Donald Davidson, "Grammar and Rhetoric: The Teacher's Problem," Teaching Freshman Composition, New York: University of Oxford Press, 1967, p. 283.

[86] Gorrell, "Very Like A Whale - A Report on Rhetoric," College Composition and Communication, p. 141.

[87] Gorrell, "Freshman Composition," Teaching Freshman Composition, p. 42.

> infinitely multiple and confusing; rather they are fairly basic and elemental: the individual and powerful purpose of the predicate; the relevant substance of the subject; the specifiable details of manner and location in modifying clause, phrase, and word; and the explicit formal guidance of connectives; thus we compose our purpose in substance, quality, order and linkage .... The composer in language, young or old, can look at his language and see its potentialities for purposes beyond him. Grammar for him can be as clear, strong, and potentially expressive as for the most accomplished artist.[88]

The rhetorical elements stressed by the aforementioned writers, are essential parts of the new rhetoric. These writers give a prominent role to the speaker or writer, and they imagine an exchange of language -- a dialogue between a speaker and his audience about a subject. They suggest that if the communication between the speaker or writer and his audience is to be effective, that speaker or writer must be able to select from his language the available alternatives which suit best his purpose. They contend that the study of language can serve a composition course if that study attempts to explain accurately, and consistently, and fully the different grammatical alternatives available to the speaker or writer. They further suggest that the new rhetoric focuses attention on the students actually composing the insights gained from studying the rhetorical principles and practices of others. Consequently, the students are not preoccupied

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[88] Josephine Miles, "What We Compose," Toward A New Rhetoric, Papers from the 1963 Conference on College Composition and Communication, pp. 15-16.

with analyzing style or learning about rhetoric; they are doing it.

Among the rhetorical approaches which offer possibilities for instruction in written composition is Francis Christensen's "Generative Rhetoric of the Sentence" and the "Generative Rhetoric of the Paragraph". In his article on the "Generative Rhetoric of the Paragraph", Christensen says, "when a supporting sentence is added, both writer and reader must see the direction of modification or direction of movement."[89] Thus Christensen keeps in mind both the reader and the writer as he analyzes his theory of the rhetoric of the sentence. At the same time, he focuses on the process of how the writer manipulates the formal and structural features of composition in eliciting the cognitive and psychological responses in the reader. Christensen points out that by the addition of free modifiers to the topic sentence; by the position of the additions, initial, medial, and final to indicate clearly the direction of modification; and by the addition of sentences or modifiers usually at a lower level of generality, paragraphs are made denser and richly textured.

In expanding his theory of the "Generative Rhetoric of the Sentence" and the "Generative Rhetoric of the Paragraph", Christensen not only considers the reader and the writer, he also combines in the study of extended discourse both a

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[89] Christensen, Notes Toward A New Rhetoric, p. 56.

concern for grammatical relationships which transcend the limits of the sentence, and a concern for conceptual or meaning relationships. As Francis Lee Utley says, "Francis Christensen's defenses of the additive and absolute principle in the 'cumulative' sentence and paragraph structures are of the highest value to rhetoricians as well as to linguists."[90] David R. Stevens also notes the practical value of Christensen's theory in the teaching of written composition. He speaks of

> ... Professor Christensen's felicitous, even exciting choice of material (especially in the essay on sentence rhetoric), his formalistic methodology, which has the strength of objectivity and does not exclude semantic classification, and his demonstrations which persuade us his work has genuine relevance to the teaching of accurate communication, in which talk of 'picturing actions and objects' and of 'developing' and 'supporting' discursive writing (exposition, argument, persuasion) is familiar terminology.[91]

In a more detailed examination of the "Rhetoric of the Sentence" Stevens explains:

> Professor Christensen's analysis of sentences and paragraphs reveals the subtlest effects of flexible, cumulative patterns in the sentence, and marks the dimension of meaning by displaying the coordination/subordination relationship of sentences in the paragraph. A study of the kinds of phrase structures, of their positioning, and of their relationships predominates in his analysis of sentence development ... and - announcing his fourth principle of paragraph rhetoric - 'Finally, the more

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[90] Utley, op. cit., p. 124.

[91] D.R. Stevens, "Concerning Generative Rhetoric," College Composition and Communication, Vol. XXVIII, No. 3, October, 1967, p. 173.

> sentences the writer adds, the denser the texture. The paragraphs our students write are likely to be as thin textured as their sentences and teachers can use this structural analysis of the paragraph to generate paragraphs of great depth.[92]

Features of the Rhetoric of the Sentence

The foundation of Professor Christensen's generative rhetoric of the sentence is taken from a statement made by John Erskine in his essay, "The Craft of Writing". In discussing one of the principles of the writer's craft Erskine says:

> ... when you write you make a point, not by subtracting as though you sharpened a pencil but by adding .... What you wish to say is not found in the noun but in what you add to qualify the noun .... The noun by itself adds nothing to the reader's information .... The noun, the verb, and the main clause serve merely as a base on which the meaning will rise. The modifier is the essential part of any sentence.[93]

This statement raises the question of what the writer adds to the noun, and the verb, and the main clause to make a point. Christensen found the answer to this question in an inductive study of the practices of contemporary professional writers whose writing he analyzed to formulate his theory of the "Rhetoric of the Sentence".

The major features of the Christensen theory are described in the following paragraphs:

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[92] Ibid., p. 173.

[93] John Erskine, "A Note on the Writer's Craft," Philosophical Library, Twentieth Century English, New York: 1946.

(1) Addition: The foundation for a generative rhetoric, a productive one, is Christensen's observation that writing is essentially a process of addition. The idea is that the base sentence pattern is simply a noun phrase plus a verb phrase. If all additions were to occur within the main clauses we would be generating overloaded, padded patterns. (e.g., The thin, tall, hook-nosed man rode a rangy, black stallion.) The additions that Christensen advocates are the free modifier sort, the movable ones, as opposed to the bound ones that result in pattern loading. The additions must be based on immediate observation, requiring the student to frame an exact observation in exact language.

Examples: She came among them from behind the man, gaunt in the gray shapeless garment and the sunbonnet, wearing stained gymnasium shoes .... - Faulkner

Now the sky was mostly shadow, with just gleams of sunlight breaking through and shining for a moment on all the men and horses in the street, making the guns and metal parts of the harness wink and lighting up the big sign on Davies store and the sagging white veranda of the inn .... - Walter Van Tilburg Clark The Ox-Bow Incident

(2) Direction of Movement or Direction of Modification: Christensen's observation of oral language is that it is linear, moving in time. He points out that writing also "moves in linear space, which is analagous to time."[94] When a modifier is added to the noun, verb, or the main clause, it must be added before the head word or after it. If the

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[94] Christensen, Notes Toward A New Rhetoric, p. 5.

modifier is added before the head, the direction of modification can be identified by an arrow pointing forward; if it is added after the head word, direction of movement is indicated by an arrow pointing backward.[95]

Examples: (a) The rattler raised its head, gazing fixedly at its victim, uncoiling slowly, slithery and wet, before it unleashed its deadly strike.

Modification in sentence (a) follows the head word; therefore, the direction of movement is backward.

(b) In the low grass, its small pointed ears flicked back and forth, its body hugging the ground, polka-dotted, melting into the patches of sunlight and shadow, the leopard watched the deer spring toward the water-hole.

In sentence (b) modification occurs before the head word. As a result, direction of movement is forward.

In some sentences, the direction of modification can move forward and backward.

(c) Scantily clad, slender bodied, with long legs and sinewy arms, the Indian warriors filed down the jagged mountainside, magnificant in their bearing, silent and alert as they stalked the soldiers in the valley below.

Christensen points out that within the clause, the position of the modifiers is relatively fixed. The writer's choice is whether to add modifiers. Simply adding modifiers or loading the pattern does not really result in a mature style of writing. Such writing "has no rhythm and hence no life; it is tone deaf."[96] Christensen suggests that the

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[95] Ibid., p. 5.

[96] Ibid., p. 5.

sentence we should be trying to teach our students is the "cumulative" sentence.

According to Christensen, the cumulative sentence is dynamic and represents the mind thinking. In such a sentence, the main clause presents and exhausts the main idea, leaving nothing more to say about it. Additions support the idea inherent in the main clause, probing its implications, illustrating it with an analogy or a metaphor, or reducing it to details. The form of such a sentence generates ideas by forcing the writer to examine his thought, and by letting the reader into that thought.

Example: She was half hunched at the back of the cage, her legs tucked under her somewhere, her weight on her stomach, and her chin resting on her folded hairy forearms.

The principles of addition and direction of movement are structural principles, dealing with the "immediate constituent" theory: the basic sentence, traditionally called an independent clause, is called a matrix sentence by most transformationalists. The sentence which is embedded, traditionally called a dependent clause, is called a constituent sentence by transformationalists. A constituent sentence of some sort can be embedded after any noun in a matrix sentence.[97] To allow for the dimension of meaning, Christensen emphasizes the central importance of the principle

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[97] Owen Thomas, Transformational Grammar and the Teaching of English, New York: Holt, Rinehart and Winston, Inc., 1965, p. 91.

of levels of generality or levels of abstraction.

(3) Levels of Generality or Levels of Abstraction: The main or base clause may be stated in general or abstract or plural terms. The forward movement of the sentence stops with the statement of the main clause, and additional levels of generality or abstraction go over the same ground supplying detail, quality, or comparison. There is no limit to the number of structural layers or levels that a writer may use.

Example: The boxer wiped the blood from his eyes and he shook his head, two quick shakes from side to side, trying desperately to clear away the haze.

Levels of generality are not just structures within structures. One is not unjustified in pointing out that the examples Christensen uses illustrate quite clearly that mature writers use words (especially verbs) that are aptly chosen. Undoubtedly, Christensen has this in mind but does not really emphasize it. The following examples demonstrate that it is not only the aptness of the structures, but also the aptness of the words chosen within the structure that results in conciseness of expression.

Example: Calico-coated, small-bodied, with delicate legs and pink faces in which their mismatched eyes rolled wild and subdued, they huddled, gaudy motionless and alert, wild as deer, deadly as rattlesnakes, quiet as doves.
- William Faulkner[98]

The beach sounds are jazzy, percussion fixing the mode -- the surface cracking and booming in

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[98] Christensen, op. cit., p. 9.

> the distance, a little nearer dropped bar-bells clanking, steel gym rings, ringing, flung together, palm fronds rustling above me, like steel brushes washing over a snare drum, troupes of sandals splatting and shuffling on the sandy cement, their beat varying, syncopation emerging and disappearing with clanging paces.[99]

(4) Texture: Texture is a descriptive or evaluative term referring to the additions a writer makes to his nouns, his verbs, or his main clauses. A rich, mature style with a dense texture, is characterized primarily by the addition of phrasal and clausal modifiers. If the writer makes a few additions, the texture may be said to be "thin or threadbare".[100] The more additions the writer makes, the denser and richer will be the texture. Christensen suggests that in composition classes "we have to work for greater density and variety in texture and greater concreteness and particularity in what is added."[101]

Example: Then I saw a dark muzzle and the shadow of horns, and then, with a clattering of wood in the hollow box, the bull charged and came out into the corral, skidding with his forefeet in the straw as he stopped, his head up, the great hump of muscle in his neck swollen tight, his body muscles quivering as he looked up at the crowd on the stone walls. - Hemingway, The Sun Also Rises

The foregoing is the rhetoric that was taught to students in this study. It is a practical rhetoric that centers on four principles: (1) addition, (2) direction of

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[99] Christensen, Notes Toward A New Rhetoric, p. 12.

[100] Ibid., p. 8.

[101] Ibid., p. 8.

movement, (3) levels of generality, and (4) texture. All the principles rest squarely on grammar; and all require conscious manipulation of certain grammatical structures.

The grammatical structures to be used in teaching the rhetoric of the sentence are described in detail in Appendix B of this study.

The Study and Analysis of Models of Writing in Composition Classes

Modern rhetoricians have expressed a keen interest in the study and analysis of models of writing as a method of instruction in composition classes. As Ulanov suggests, "Composition classes that do not draw their writing principles from the examination of writing of quality must bog down sooner or later ...."[102] Guth maintains that one of the criteria of good writing is concreteness, and that the natural instinct of the first rate writer is to anchor what he says in concreteness. He further suggests that "It is this feature of good writing that the instructor can most graphically illustrate by reference to good 'models', that is, simply, to first-rate prose."[103]

Gleason,[104] Corbett,[105] and others believe that students

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[102] Ulanov, op. cit., p. 408.

[103] Hans P. Guth, "Rhetoric and the Quest for Certainty," College English, Vol. XXIV, 1962, p. 134.

[104] H.A. Gleason, Jr., op. cit., pp. 405.

[105] Edward P.J. Corbett, "The Usefulness of Classical Rhetoric," College Composition and Communication, Vol. XIV, October, 1963, p. 163.

can be helped to acquire a good style of writing through the study and analysis of models. Such procedures involve: (1) analysis, which consists of the definition of rhetorical principles and the discussion of their use as models of effective expression; and (2) application, which consists of the use of these principles for more effective expression. The requirement, therefore, is that the student

> begin with the analysis of isolated selections to discover how they were organized, what kinds of arguments were used, and how the author marshalled certain kinds of words and sentences in order to achieve his desired effect.[106]

It is reasonable to assume that from a study of a wide variety of mature writing, students may be attracted to one style of writing in preference to another. Hughes and Duhamel say that "style is not a biological inheritance; it is an acquired skill. The best way to cultivate a style is to be aware of its successful use by other stylists."[107] Helen F. Olson[108] agrees with this point of view and suggests that models of well-written passages can help students to identify various stylistic structures and to discuss the impact of variation in structure. Squire and Applebee see the value of

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[106] Richard E. Hughes and P.A. Duhamel, Rhetoric: Principles and Usage, 2nd ed., New Jersey: Prentice-Hall, Inc., 1967, p. 4.

[107] Ibid., p. 523.

[108] Helen F. Olson, "What Is Good Teaching of English?" English Journal, Vol. L, 1961, p. 241.

the use of models in helping students achieve a better sense of direction and form in their writing. They maintain that "the judicious use of models is a positive and valuable device in teaching students to write better."[109]

The thoughts expressed in the foregoing paragraphs regarding the use of models of writing in composition classes reveal a major concern for searching out what is desirable for our young writers. Many educators agree that the method of instruction in composition classrooms must incorporate the study and analysis of models in the general plan of instruction. If we are to avoid inflicting our subjective impressions about writing on students "we must look outside ourselves for standards -- to authority or to the practice of professional writers."[110] In this study, the practice of contemporary professional writers has been used to demonstrate to students how language can be used appropriately and effectively.

THE ANALYSIS OF STYLE

In most studies in style, the writer's definition of it depends to a large extent on the stylistic activity in which he is interested at a given time. As Leo Rockas says, "critics will define style in such a way as to rationalize

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[109] Squire and Applebee, op. cit., p. 136.

[110] Christensen, Notes Toward A New Rhetoric, p. 39.

whatever stylistic activity they choose later to indulge."[111] These activities have included the analyses of the ways authors embellish and ornament their thoughts in writing; the examination of literary language to penetrate the author's mind; the concentration on the linguistic features of texts to provide a better understanding of the texts themselves; the study of style as manifested in the author's choice of words, the analysis and discussion of "prose rhythm", which, to a high degree, involve the perception and scansion of metrical patterns in selected examples of prose; and other studies dealing with structures of sound in poetry, and other linguistic aspects of poetry. Although these activites have not resulted in any explicit definition of style, certain assumptions about it are contained in all the studies. Perhaps, one can assume that the inability of these activities to produce a comprehensive and convincing explanation of the notion of style may be due to the absence of an appropriate underlying linguistic and semantic theory. New linguistic data obtained from the current research done on language development and language analysis studies enable modern rhetoricians to create refined methods of stylistic analyses. In fact, Richard Ohmann says, "recent developments in generative grammar, particularly in the transformational model, promise, first, to clear away a good deal of the mist from

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[111] Leo Rockas, "The Description of Styles: Dr. Johnson and His Critics." Unpublished Doctoral dissertation, University of Michigan, 1959, p. 7.

stylistic theory, and, second, to make possible a corresponding refinement in the practice of stylistic analysis."[112]

Some modern rhetoricians say that the purpose of style in writing is to give identity to effective communication, whether the discourse be description, narration, exposition, or argumentation. "Identity", says Lockerbie, develops from the conscious selection of diction and the adaptation of syntax; it is moulded into style after much practice, much explanation, and much guidance."[113] What is significant to this study, is the fact that, like Lockerbie, other rhetoricians insist that anyone who writes is selecting certain grammatical patterns from among those provided by his language;[114] that this selection is conscious; that this conscious selection contributes to the development of the individual's style; and that the individual's ability to select appropriate patterns can be increased. Sumner Ives claims that the individual's

> ... ability to make felicitous selection is one dimension of his ability as a writer, and it seems likely that this ability can be increased through appropriate training. Likewise the particular selection of words and constructions in a

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[112] Richard Ohmann, "Generative Grammars and the Concept of Literary Style," Teaching Freshman Composition, Tate and Corbett, (ed.), University of Oxford Press, 1967, p. 264.

[113] David B. Lockerbie, "The Speaking Voice Approach Joins the Rhetoric Parade," English Journal, Vol. LVI, March, 1967, p. 416.

[114] Corbett, op. cit., pp. 384-388.

> piece of writing contributes to its general effects - what we call its style.[115]

It follows that if the student is indeed able to recognize the optional grammatical patterns provided by his language, and if he can select and manipulate these patterns to achieve the effects he wishes to create for a particular audience, then, according to the modern rhetorician, that individual has acquired what he calls style in writing. Consequently, if the dangers of subjectivism and impressionism are to be avoided in the analysis of the student's style of writing, researchers must, in fact, concentrate on an analysis of the syntactic patterns the student selects and uses in his writing. Corbett suggests that stylistic analysis must start with close observation of what the writer does actually write. He further suggests, for example, that "sentence length is one of the features that can tell us something about the author's style."[116] A tenable generalization of a writer's characteristic sentence-length cannot be made, however, unless the exact length of his sentences can somehow be determined. It has become increasingly apparent that stylistic investigators today are making use of counting and tabulating procedures -- what current researchers refer to as "stylostatistics".

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[115] Sumner Ives, "Grammar and Style," English Journal, Vol. LII, May, 1963, p. 364.

[116] Edward P.J. Corbett, "A Method of Analyzing Prose Style with a Demonstration Analysis of Swift's A Model Proposal," Teaching Freshman Composition, Tate and Corbett, (ed.), New York: University of Oxford Press, 1967, p. 295.

THE USE OF STYLOSTATISTICS IN THE ANALYSIS OF STYLE

There is an overt hostility on the part of many critics to the use of statistical methods in literary scholarship. For example, Harry Levin says that "we need make no word-count to be sure that (Hemingway's) literary vocabulary, with foreign and technical exceptions, consists of relatively few and short words."[117] This statement indicates that Levin has actually made an intuitive "word-count". He has chosen, however, not to support it by statistical devices. Despite such criticism, stylistic investigations today do make use of counts of one sort or another in the analysis of style and the investigators seem less inclined to apologize for using them.

Whether researchers or critics choose to make frequency counts or not, the question of what aspects of language should be examined, remains. Perhaps the answer to this question can be found in those studies which, in an effort to secure some objectivity in the study of style, have made rigorous frequency counts of the linguistic features in writing. As Jackobovits says,

> The analysis of style can proceed at various levels. At the lower 'micro' level, attention is focused on individual units of

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[117] Harry Levin, "Observations on the Style of Ernest Hemingway," Kenyon Review, Vol. XIII, 1951, p. 596.

> discourse such as lexemes and phrases. At some higher 'macro' level, one is concerned with larger units such as the sentence, the paragraph ....[118]

Several authorities in English education have suggested ways of using frequency counts in the analysis of style at the higher "macro" level. Josephine Miles[119] has counted a variety of clausal and phrasal structures to help explain stylistic trends in English poetry. Edward Corbett has described a method of analysis that involves quantification of syntactic structures and lexical characteristics that can easily be adapted for use in the classroom. Corbett claims that the most useful syntactic unit to study is the sentence. He says, furthermore, that

> In studying varieties of sentence patterns, we can look at such things as inversions of normal word-order, the frequency and kind of sentence openers (infinitives, gerunds, or participial phrases; adverb clauses; absolute constructions; expletive patterns; conjunctive words and phrases); and the methods and location of expansion in the sentences.[120]

Richard Ohmann[121] has shown how the principles of transformational grammar can be used to characterize the syntax of writing. Finally, the work of Kellogg Hunt, of David

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[118] Leo A. Jackobovits, "Rhetoric and Stylistics: Some Basic Issues in the Analysis of Discourse," College Composition and Communication, Vol. XX, 1969, p. 319.

[119] Josephine Miles, Eras and Modes in English Poetry, Berkeley: University of California, 1957.

[120] Corbett, op. cit., p. 298.

[121] Ohmann, op. cit., pp. 261-277.

Bateman, and Frank Zidonis, and of John Mellon has shown how grammatical analysis can be of value in analyzing style in students' writing. Some of these studies will be examined in greater detail in the following section.

REVIEW OF RELATED STUDIES ON THE DEVELOPMENT AND ANALYSIS OF STYLE IN STUDENTS' WRITING

To find appropriate measures which would reflect the growth of a student's maturing style, the writer reviewed many related language studies. These studies revealed that relatively few measures of language maturity have been developed. In the following paragraphs available measures are examined and the selection of those which best suit the purposes of this study is justified.

(1) Sentence Length: As early as 1925, sentence length was used by M.N. Nice to determine the speech development of students. She assumed that a child's skill in sentence structure afforded a simple criterion of his advancement in mastery of speech. Her study concentrated on single word utterances; early sentences; the short sentence of three to four words; and the complete sentence of six to eight words. From this study she observed that the recording of thirty or more sentences and finding their average length gives a cross section of the individual's speech development and enables us to determine his progress in speech. At the conclusion of the study, Nice emphasized the fact that she

was concerned with the average length of the sentence and not the exceptional one and maintained that "This average sentence length may well prove to be the most important single criterion for judging a child's progress in the attainment of adult language."[122]

In 1933, Lou LaBrant studied the length of both main and subordinate clauses, and concluded that "apparently length of clauses is not a significant measure of language development for children in grades four to twelve inclusive."[123]

Almost two decades later, McCarthy commented upon the paucity of other measures of language development and testified that up to the time of her study no other measure superseded the average length of sentence for a reliable, objective measure of linguistic maturity.[124]

In his study of the Grammatical Structures Written at Three Grade Levels", in 1965, Kellogg W. Hunt observed that

> If a sentence is defined as whatsoever is written between terminal marks, and if sentence length is assumed to be an index of language maturity, then the child who underpunctuates

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[122] M.N. Nice, "Length of Sentence as a Criterion of a Child's Progress," Journal of Educational Psychology, Vol. XVI, Sept., 1925, p. 378.

[123] Lou LaBrant, "A Study of Certain Language Developments in Grades Four to Twelve Inclusive," Genetic Psychology Monographs, Vol. XIV, Nov., 1933, pp. 387-391.

[124] Dorothea McCarthy, "Language Development in Children," Manual of Child Psychology, L. Carmichael, (ed.), 2nd edition, New York: John Wiley and Son, Inc., 1954, p. 550.

> or uses 'and' the most will, regrettably, be credited with the greatest language maturity.[125]

Thus, Hunt found sentence length a highly unreliable measure of syntactic development because any sequence of independent clauses can be punctuated so as to make the sentence long or short. Although Hunt used sentence length as a measure in his study, he did not expect it to be a good index. He also points out that "average sentence length" is a far from satisfying index of individual maturity.[126]

(2) Subordination Index: LaBrant's investigation in 1933 led her to believe that neither sentence length nor clause length was an adequate measure of maturity. Consequently, she developed the concept of the "Subordination Index" which is the number of subordinate clauses divided by the number of all clauses, both subordinate and main. LaBrant's "subordination index" proved to be a significant measure of maturity in writing and it has been used in many studies since its inception in 1933. The subordination index is indeed a helpful measure of increased grammatical maturity, but as Loban points out, it disregards other syntactic structures such as adverb phrases, verbal phrases, prepositional phrases, and other devices which can contribute to compression and effectiveness of expression. In noting the

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[125] Kellogg W. Hunt, Grammatical Structures Written at Three Grade Levels, NCTE Research Report No. 3, Champaign, Illinois: NCTE, 1965.

[126] Ibid., p. 9.

differences between the high and low group in his own study, Loban points out that it is not the pattern that is important but what is done within the pattern: it is the latter that enables the writer to achieve the flexibility that proves to be a measure of effectiveness and control of language.[127]

Hunt[128] also raised several objections to the use of the subordinate index as a measure of syntactic maturity. In like manner, Potter[129] claims that in his study he found little usefulness in the subordination index as a measure of syntactic maturity.

(3) Ratio of Clauses to T-units: After noting the weaknesses of the subordination index, Hunt developed another measure which gives comparable information but which is more widely usable. The new measure is the ratio of clauses per T-unit.

$$\text{Ratio of clauses to T-units} = \frac{\text{subordinate and main clauses}}{\text{main clauses}}$$

In each T-unit, one clause is always the main clause; the ratio, minus one, is, therefore, the average number of subordinate clauses per main clause. Thus if the ratio number

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[127] Loban, op. cit., pp. 60-61, 84.

[128] Hunt, op. cit., p. 14.

[129] Robert R. Potter, "Sentence Structure and Prose Quality: An Exploratory Study," Research in the Teaching of English, Richard Braddock, (ed.), Champaign, Illinois: NCTE, 1967, p. 24.

for grade eight was 1.65 we would say that 65 percent of the time the eighth graders added a subordinate clause. The uses of this measure are: (1) it provides an arithmetic bridge between clause length and T-unit length; (2) it conveniently expresses the frequency with which a subordinate clause is added to a main clause; and (3) it serves as an index of one kind of grammatical development.[130]

(4) T-unit: Kellogg Hunt's critical examination of sentence length as a measure of syntactic maturity also led him to replace that measure by the "minimal terminable unit" or T-unit, defined as a unit consisting of a main or independent clause plus whatever dependent clauses or other grammatical subordination units may happen to be embedded within it or appended to it.

Hunt points out that as a measure of maturity the T-unit has the advantage of preserving all the subordination achieved by a student, and all his coordination between words and phrases and subordinate clauses. Hunt concludes that the T-unit is the best index yet devised for determining maturity in language.[131] In computing the "mean T-unit length" for all grades Hunt noted that the mean for each grade was: grade four 8.6; grade eight 11.5; grade twelve 14.4.[132] Those findings indicate that as children grow older they write longer T-units.

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[130]Hunt, op. cit., p. 36. [131]Hunt, op. cit., p. 23.

[132]Ibid., p. 22.

Hunt suggests that the attainment of longer T-units is accomplished by producing longer clauses (both main and dependent) through a process of addition or embedding, or by increasing the number of subordinate clauses.[133] In explaining what actually accounts for the added length of clauses Hunt says that it is: (1) nominals such as noun clauses and phrases used in place of nouns and pronouns, and (2) modifiers embedded before and after nouns to lengthen the noun phrase.

Christensen refutes this explanation by saying:

> The sentences of all but the most immature or inept writing are made long, in part, by a class of constructions far different in rhetorical effect from nominalizations and relative embeddings. This class is the so-called sentence modifiers or (free modifiers).[134]

Christensen's contention is that when a bound modifier is added to a noun, a verb, or a main clause, it must be added before the head word or after it. Contrary to Hunt's view, Christensen points out that there is not much scope for the addition of free modifiers within the clause where bound modifiers or word modifiers are often used. Such modifiers are limiting or obligatory. Consequently, they do not give the writer the freedom that rhetoric demands.

> Free modifiers, on the other hand, are modifiers not of words but of constructions, from which they are set off by junctures or

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[133] Ibid., p. 36.

[134] Christensen, "The Problem of Defining A Mature Style," English Journal, p. 576.

> punctuation. Grammatically, they are loose, or additive, or nonessential, or nonrestrictive. The constructions used are prepositional phrases; relative and subordinate clauses; noun, verb, adjective, and adverb phrases or clusters; and, one of the most important, verbid clauses or absolutes. These free modifiers give the options that rhetoric demands.[135]

Christensen points out that variations in the kind of free modifiers, the position of free modifiers, and the frequency of use of free modifiers will differentiate the different styles. He believes that students can be taught to use the free modifiers and suggests that it is at this point "that grammar and rhetoric can be brought together in a fruitful conjunction to bring about a mature style truly in the modern idiom."[136]

To illustrate what he means by a mature style, Christensen chose six essays from Harper's (February 1964 and August 1967) written by non-professional, semi-professional, and professional writers for analysis. He claims that his six-author sample is not adequate, and that the paragraphs may not be typical. Nevertheless, he submits "that they are representative of what will be found in the writing of skilled adults."[137] Table I presents a frequency count made on fifty T-units taken from each essay.

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[135] Ibid., p. 577.

[136] Ibid., p. 577.

[137] Ibid., p. 579.

TABLE I[138]

RELATIVE LENGTH OF (1) T-UNITS, (2) FREE MODIFIERS, AND (3) BASE CLAUSES

	Non-Professional		Semi-Professional		Professional		Average
	Barnes	Szasz	Boroff	Goodman	Morris	Halber-stam	
(1) T-units -- 100 per cent of total words							
Total words	967	832	944	911	1037	1155	
Average per T-unit	19.3	14.6	18.9	18.2	20.7	23.1	19.5
(2) Free Modifiers -- 32 per cent of total words							
Initial	129	94	51	107	70	76	
Medial	28	36	93	23	20	103	
Final	55	106	154	169	242	313	
Total words in free mod.	212	236	298	299	382	492	
Average words per T-unit	4.24	4.72	5.84	6.0	6.6	9.8	6.2
(3) Base Clauses -- 68 per cent of total words							
Words in T-units	967	832	944	911	1037	1155	
Words in free mod.	212	236	298	299	332	492	
Words in base clauses	755	596	646	612	705	663	
Average per base clause	15.1	11.9	12.9	12.2	14.1	13.1	13.3

[138] Ibid., p. 577.

Table I reveals that the T-units average 19.5 words. Although the variations in T-unit length from left to right have no significance, the variations with the free modifiers are significant. The total number of words in the free modifiers varies from 212 for Barnes to 492 for Halberstam. In Barnes' writing, 22 per cent of the words are in free modifiers, in Halberstam's writing over 42 per cent. Christensen concludes that "a large percentage seem to be the mark of the skillful writer."[139] Table I also reveals that the position of the free modifiers varies significantly: Christensen points out "that non-professional writers tend to put them up front; professional writers tend to use them at the end -- to write, that is, what I call the cumulative sentence."[140] In such a sentence,

> The main clause ... advances the discussion; the additions placed after it move backward, as in this sentence, to modify the statement of the base clause or more often to explain it or add examples or details to it, so that the sentence has a flowing and ebbing movement, advancing to a new position and then pausing to consolidate it ....[141]

It seems that much of the effectiveness in the cumulative sentence comes from the use of verb and noun clusters, participials, and absolutes used singly or in series. The very nature of the cumulative sentence discourages the student

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[139] Ibid., p. 577.

[140] Ibid., p. 578.

[141] Christensen, Notes Toward A New Rhetoric, p. 5.

from writing what Christensen calls "pretzel prose". He maintains that the mature writer is the one who has mastered the cumulative sentence.

The use of free modifiers as a mark of a mature style has also been recognized by D.R. Bateman, who says:

> Prose becomes more complex structurally as the layers of modification increase, for it is usually modification that explores the rich detail of a particular set of relations or configuration. When prose becomes rich and full, it is almost always heavily modified, and the large modifiers, as they are in the Faulkner sentence, are often more complex structures themselves.[142]

Bateman suggests that when students are able to use layers of modification to produce a unified picture this illustrates "a notable growth in the use of complex structures to symbolize more mature experiences."[143]

Finally, Christensen objects to the long noun phrase as a measure of syntactic maturity. He says:

> The very hallmark of jargon is the long noun phrase - the long noun phrase used as subject and the long noun phrase as complement, the two coupled by a minimal verb. One of the hardest things to learn in learning to write well is how to keep noun phrases short. The skillful writer is the one who has learned to keep them short.[144]

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[142] Donald R. Bateman, "More Mature Writing Through a Better Understanding of Language Structure," English Journal, Vol. L, 1961, p. 459.

[143] Ibid., p. 468.

[144] Christensen, "The Problems of Defining A Mature Style," p. 575.

In examining the base clauses used by his sample of authors, Christensen makes this observation:

> The significance here is not in the variation in length of the base clauses but in the fact that all these writers have managed to keep them short. The average length is 13.3 words; and, mark this carefully, this is less than the length of the T-units of Professor Hunt's twelfth-graders, 14.4 words. And mark carefully the conclusion to be drawn from this - the difference lies in the free modifiers. The T-units are long but the base clauses are short - kept short in large part, ... by the full use of free modifiers.[145]

Christensen concludes his analysis with what he believes will mark a mature style. He states:

> 1. A mature style will have a relatively high frequency of free modifiers, especially in the final position. The frequency of free noun, verb, and adjective phrases, and of verbid clauses will be high.
> 2. Such a style will have also a relatively high frequency of coordination within the T-unit - what might be called intra-T-unit coordination.[146]

Christensen's theory of the "Generative Rhetoric of the Sentence", and the criteria suggested in "The Problems of Defining A Mature Style", provide a fresh, and a practical approach to the teaching of composition, and an objective approach to the analysis of style in students' writing. Christensen attempts to destroy the belief that a mature style is a style based on the amplification of main clauses, and on frequent elaborate subordinations. His study of the styles of contemporary professional writers has shown that a

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[145] Ibid., p. 578.

[146] Ibid., p. 579.

mature style depends on short main clauses, especially short noun phrases, and on longer sentence modifiers -- the free modifiers. These characteristics, the marks of a mature style, have been selected as criteria for assessing the maturity of students' writing in this study. These criteria are presented in Chapter III.

SUMMARY

The criticisms levelled against high school and college graduates, the growing realization of the large amount of inexpert teaching in composition classes, the unrealistic preparation provided to equip people to teach composition, the ineffectiveness of earlier instruction in schools and colleges, and a growing public agitation for better work in English have all contributed to the increased rise of interest in the new rhetoric. The revival of interest in the old rhetoric, the impact of new knowledge -- especially in linguistics, and the firm belief held by modern rhetoricians that it is both possible and desirable to teach composition in an intellectually responsible way, continue to generate interest in the new rhetoric.

Modern rhetoricians stress certain rhetorical elements which are essential parts of the new rhetoric. These rhetoricians give a prominent role to the speaker or writer, and they imagine an exchange of language -- a dialogue between a speaker and his audience about a subject. They suggest that

if communication between the speaker or writer and his audience is to be effective, that speaker or writer must be able to select from his language the available alternatives which suit best his purpose. They further suggest that the study of language can serve a composition course if that study attempts to explain accurately, and consistently, and fully, the different grammatical alternatives available to the speaker or writer.

Among the rhetorical approaches which offer possibilities for instruction in written composition is Francis Christensen's "Generative Rhetoric of the Sentence". Christensen's approach is a practical one and it is based upon four principles: (1) addition, (2) direction of movement, (3) levels of generality, and (4) texture. All the principles rest squarely on grammar, and all require conscious manipulation of certain grammatical structures. In developing his theory, Christensen further suggests an objective approach to the analysis of style in students' writing.

The present study, therefore, is designed to investigate whether or not students who receive instruction in the features of Christensen's rhetoric of the sentence will write more stylistically mature prose than those students who receive instruction in the principles of writing through traditional grammar. The marks of a mature style, as defined by Christensen, have been selected as the criteria for assessing the maturity of students' writing in this study.

CHAPTER III

THE DESIGN OF THE STUDY

INTRODUCTION

Chapter III presents a description of the nature of the sample, a description of the selection criterion, and the procedures used for selecting the ability groups from the sample. This chapter also contains an explanation of the instructional procedures for the experimental and control groups, a presentation of the data dealing with the selection of teachers for the study, a description of the procedures used in constructing the criterion measures, a description of the procedures used in scoring the WET, and the WCT, and a description of the criteria used for making the frequency counts on the WET, and the WCT. In addition, the validation and reliability of the WET, and a summary of the pilot study are reported.

OVERVIEW OF THE EXPERIMENT

The experiment was designed to study the effects of instruction in the features of the rhetoric of the sentence on the written composition of students in grades seven, eight, and nine, and to investigate the extent to which students at these levels are able to use the syntactic structures in actual writing situations.

The experimental design required six classes at each of the three grade levels (seven, eight, and nine), making a total of eighteen classes. Three classes at each level were randomly designated as experimental groups and three were randomly designated as control groups. At each level, three teachers were required to teach both the experimental and the control groups, each teacher teaching one experimental and one control group.

The experiment commenced on November 3, 1969, and ended on December 17, 1969. During the first week, beginning November 3, 1969, students in the experimental and control groups were asked to write three pretest paragraphs (see Appendix G, 1) and the WET (see Appendix F). Five weeks of instruction followed (see page 85 for further details). After this period of instruction, the experiment concluded with the writing of three posttest paragraphs on similar topics, and the WET, on December 15-17, 1969. Using the pretest scores as the covariate, the posttest scores were then analyzed by a two by three by three analysis of covariance -- the major factors being treatment, grade level, and ability level.

THE NATURE OF THE SAMPLE

The sample was selected from a population of 614 grade seven, eight, and nine students in one junior high school in the city of Edmonton, Alberta.

The area in which the school is situated is described as a "cosmopolitan area" -- that is, the school community is composed of people who are fairly evenly distributed among socio-economic groups ranging from professional to unskilled workers. Sufficient evidence was obtained from students' cumulative records, and from interviews with the principal and teachers to conclude that the area in which the school is located is indeed a cosmopolitan area. The sample, then, was selected from a school community composed of people ranging from professional to unskilled workers.

Six classes at each of the three grade levels were selected from the junior high school, making a total of eighteen classes. The principal and the vice-principal stated that all students were randomly assigned to classrooms at each grade level. Since the teachers were already assigned to the various classes, the investigator randomly designated three classes (students and teachers) as experimental groups, and three classes as control groups.

THE ABILITY MEASURING INSTRUMENT

The Lorge-Thorndike Intelligence Test (Level 4, Form A, Verbal Battery) was selected as the measure of student ability on the following grounds:

An examination of the students' cumulative records revealed that the Lorge-Thorndike Intelligence Test (Level 4,

Form A, Verbal Battery) had been administered to all students at the grade seven, eight, and nine levels, as part of the public school system's testing program. The students involved in this study wrote the test on the following dates: Grade seven -- February 1969; Grade eight -- February 1968; Grade nine -- February 1967.

In a manual accompanying the Lorge-Thorndike Intelligence Tests, the authors state:

> Experience has shown that verbal test items give a good measure of the ability to do typical classroom assignments. Thus, verbal items provide a good index of scholastic aptitude.[147]

In his review of the tests, Freeman reports that the following mental processes are descriptive of the behavior sampled by the tests:

> (a) dealing with abstract and general concepts, (b) interpretation and use of symbols, (c) dealing with relationships among concepts and symbols, (d) symbols, (e) utilizing one's experience in new patterns, and (f) utilizing 'power' rather than speed in working with abstract materials.[148]

Though a few of these processes might have more relevance for the Non Verbal Battery, a few (a, e, and f), are especially related to the writing process. In other words, the items in the Verbal Battery do tend to measure critical powers which are directly related to the ability to write. For example,

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[147] The Lorge-Thorndike Intelligence Tests: Examiner's Manual, Level 4, Grades 7, 8, 9, Boston: Riverside Press, 1959, p. 14.

[148] Frank S. Freeman, The Fifth Measurement Yearbook, O.K. Buros, (ed.), Highland Park, New Jersey: The Gryphon Press, 1959, p. 350.

the test requires students to make rational choices among words, a process which is an integral part of the new rhetoric. Besides being a sound group instrument,[149] the test provides reliable measures of verbal reasoning.[150] The Technical Manual reports a reliability coefficient of .865 for the Verbal Battery, Level 4 (Grades 7, 8, and 9).[151] The reliability coefficient for the Lorge-Thorndike Intelligence Test is computed on a single grade population covering a wide spread of grades. The authors claim that this procedure "is the most conservative and realistic procedure."[152] Further evidence of the reliability of the scales is presented in the alternate forms reliability coefficients. The manual reports the highest coefficients for the verbal scales for levels 3, 4, and 5: .90, .86, .86 respectively.[153]

THE SELECTION OF THE SAMPLE AND THE PROCEDURES FOR ESTABLISHING THE ABILITY GROUPS

The design of the investigation called for comparisons among experimental and control groups of students in the

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[149] Ibid., p. 350.

[150] D.A. Pigeon, The Fifth Measurement Yearbook, O.K. Buros, (ed.), Highland Park, New Jersey: The Gryphon Press, 1959, pp. 350-51.

[151] The Lorge-Thorndike Intelligence Tests: Technical Manual, Boston: Houghton Mifflin Co., 1962, p. 8.

[152] The Lorge-Thorndike Intelligence Tests, op. cit., p. 9.

[153] Ibid., p. 8.

junior high school, the groups to be arranged by grade level, (grades seven, eight, and nine), and by ability level, (high, mid, and low). Thirty-six students, twelve from each of the high, mid, and low ability groups were selected from each of the experimental and control groups at each grade level. This selection was made on the grounds that the sample of students was sufficiently large to avoid the specialized statistical treatments required for very small groups; that the use of the same number of students in each group would enable the investigator to avoid unnecessary statistical complications resulting from different sized groups; and that the sample selected would enable the investigator to avoid excessive cost of marking the students' compositions. Table II presents a model of the composition of the experimental and control groups.

TABLE II

COMPOSITION OF EXPERIMENTAL AND CONTROL SAMPLES

Grade	High Ability		Mid Ability		Low Ability	
	Exptl.	Control	Exptl.	Control	Exptl.	Control
7	12	12	12	12	12	12
8	12	12	12	12	12	12
9	12	12	12	12	12	12

In selecting the sample, a stratified random sampling technique was used which provided a sample reasonably representative of grades seven, eight, and nine in the experimental school. Since the experimental school is a typical junior high school, it should be possible to generalize the findings to the junior high school population of Edmonton.

The Lorge-Thorndike scores obtained by all the students in the experimental and control groups at each grade level were arranged in rank order from the highest to the lowest. In order to select the ability groups, cut-off I.Q. points had to be established. The grade eight control group was designated the model group for this purpose. With respect to the rankings, this group was divided into thirds, thus providing a top third, a middle third, and a bottom third. The scores which marked the cut-off points for each third were found to be as follows: the top third, 120 and over; the middle third, 109-119; the bottom third, 108 and below. These scores were used as the ability level cut-off points for the experimental and control groups in grades seven, eight, and nine. Then using a table of random numbers,[154] twelve students from each third in each of the total experimental and total control groups at each grade level were selected as the sample, making a total of 216 students for all the grades.

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[154] Allen L. Edwards, Experimental Design in Psychological Research, New York: Holt, Rinehart and Winston, 1960, pp. 332-336.

Thus, for purposes of this study, the high, mid, and low ability groups for each grade level are defined as follows:

(1) The high ability groups are composed of two groups of twelve students (randomly selected from the top thirds in ability in each of the experimental and control groups at each grade level) who obtained I.Q. scores of 120 and over on the Lorge-Thorndike Intelligence Test.

(2) The mid ability groups are composed of two groups of twelve students randomly selected from the middle thirds in ability in each of the experimental and control groups whose I.Q. scores on the Lorge-Thorndike Intelligence Test fell between 109-119.

(3) The low ability groups are composed of two groups of twelve students randomly selected from the bottom thirds in ability in each of the experimental and control groups who obtained I.Q. scores of 108 and below on the Lorge-Thorndike Intelligence Test.

Sampling Procedures for the Ability Subgroups

The investigation called for comparisons among ability groups in the experimental and the control groups at each grade level. Because of the excessive cost of marking all the paragraphs written by the students in the sample, it was decided to use fifty per cent of the sample for comparisons involving the WCT. Consequently, the investigator selected six students from each of the high, mid, and low ability

groups in each of the experimental and control groups at each grade level to discover whether or not instruction in the rhetoric of the sentence had resulted in differential effects on the written composition of students from different ability groups.

The high, mid, and low ability subgroups were drawn from the sample as follows:

(a) the high ability subgroup is composed of the top six students in the high ability groups at each grade level.

(b) the mid ability subgroup is composed of the six students whose I.Q. scores fall in the middle of the mid ability groups at each grade level.

(c) the low ability subgroup is composed of the bottom six students in the low ability groups at each grade level.

Table III presents the means and standard deviations for the sample by grade level, and ability level.

Following the selection of the sample, and the establishment of the ability groups, a three-way analysis of variance was conducted to determine whether or not there was any significant I.Q. difference between the major factors (treatment, ability, and grade). The results of this analysis are presented in Table IV.

Table IV indicates that the ability factor constituted the only main effect which was significant ($p < .05$). When multiple pairwise comparisons were carried out on the ability

TABLE III

MEANS AND STANDARD DEVIATIONS FOR THE LORGE-THORNDIKE I.Q. SCORES BY GRADE LEVEL, BY ABILITY LEVEL AND BY TREATMENT

Ability Level	N	$\bar{X}$ S.D.	Experimental			Control		
			Grade 7	Grade 8	Grade 9	Grade 7	Grade 8	Grade 9
High	12	$\bar{X}$	128.08	126.58	126.17	124.58	124.83	126.83
		S.D.	4.92	3.15	6.21	4.48	3.18	3.34
Mid	12	$\bar{X}$	115.25	114.67	115.17	114.25	113.17	115.83
		S.D.	2.38	3.12	2.61	2.68	2.08	2.34
Low	12	$\bar{X}$	104.67	105.08	103.00	103.33	102.67	105.50
		S.D.	4.35	3.86	5.70	2.53	5.51	3.12
Total Grade	36	$\bar{X}$	116.00	115.44	114.78	114.06	113.56	116.06
		S.D.	10.38	9.43	10.75	9.30	9.84	9.20

TABLE IV

SUMMARY OF ANALYSIS OF VARIANCE FOR THE LORGE-THORNDIKE I.Q. SCORES

Source	SS	df	MS	F	P
Treatment	39.19	1	39.19	2.42	0.12
Ability	17651.9	2	8825.97	545.77	0.0 *
Treat. x Ability	12.68	2	6.34	0.39	0.68
Grade	30.48	2	15.24	0.94	0.39
Ability x Grade	9.74	4	2.44	0.15	0.96
Treat. x Grade	122.48	2	61.24	3.79	0.02*
Treat. x Ability x Grade	25.57	4	6.39	0.40	0.81
Error	3202.00	198	16.17		

$p < .05$

factor, it was found that (1) the mean I.Q. score for the high ability group (126.18) was significantly higher than the mean I.Q. score for the mid ability group; (2) the mean I.Q. score for the mid ability group (114.72) was significantly higher than the mean I.Q. score for the low ability group (104.04); and (3) the mean I.Q. score for the high ability group was significantly higher than the mean I.Q. score for the low ability group.

The first order interaction between grades and treatment which was also found to be significant, is presented

graphically in Figure I. This interaction may be explained as follows: The mean I.Q. scores for the grade seven and eight students in the experimental group were slightly higher than those for the control group. In grade nine, the reverse occurred.

INSTRUCTIONAL PROCEDURES

Treatments

The Experimental Groups: Students in the experimental groups were given instruction in the features of the rhetoric of the sentence. The instructional materials were prepared by the investigator of this study, and the teachers were instructed in the use of these materials through a series of in-service meetings. The procedures for teaching the daily lessons, the assignments, and the study sentences and paragraphs appear as Appendix B, Appendix C, and Appendix D, respectively.

The regular classroom teacher instructed the students in the experimental groups for five weeks following the administration of the pretests. Four 40-minute periods per week were devoted to the experiment. Class assignments and writing practice were done in regular class time. Writing practice took the form of five one-paragraph compositions spaced over the five week period (see Appendix A,8.c.).

Students in the experimental groups wrote a posttest at the conclusion of the instructional period. The posttest

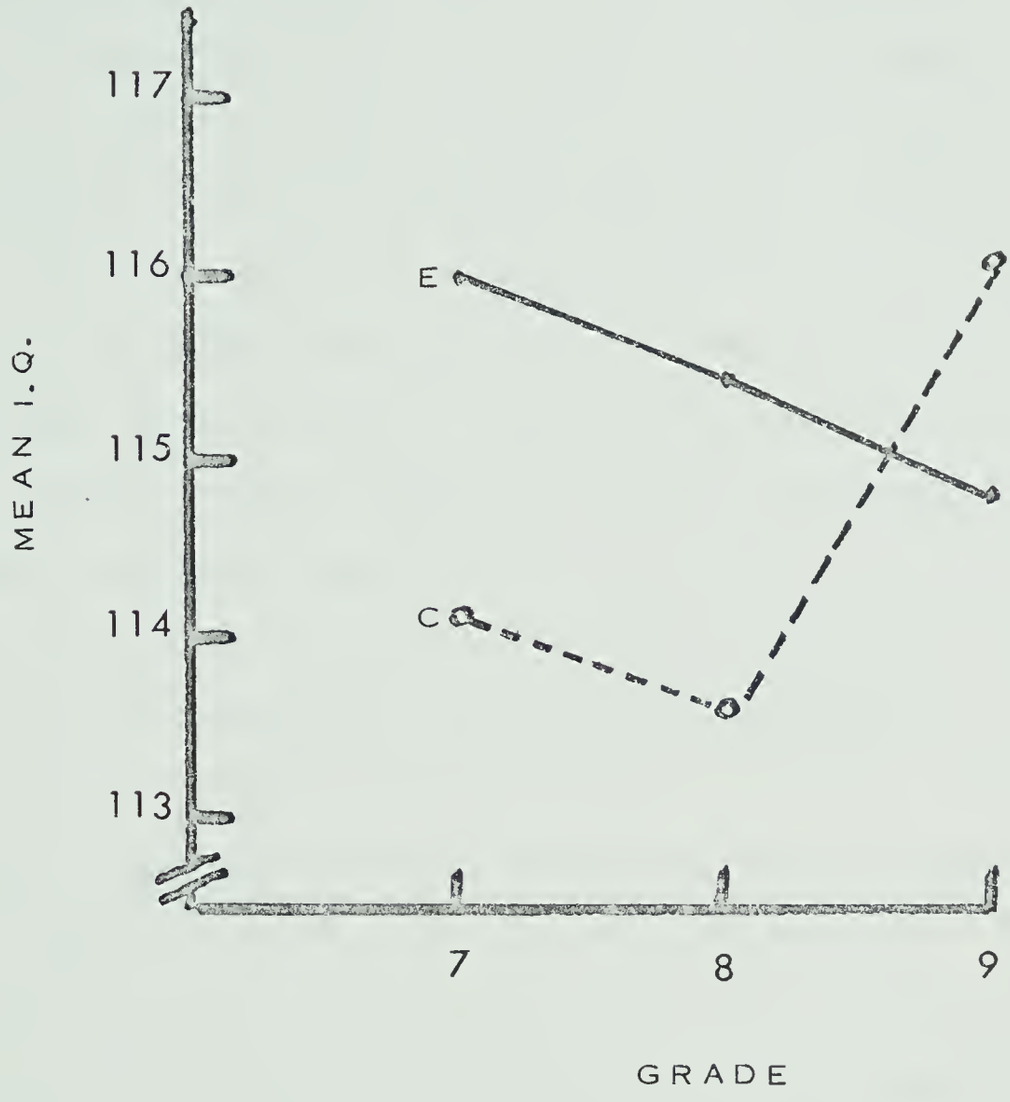

FIGURE I

INTERACTION BETWEEN TREATMENT AND GRADE FOR I.Q. SCORES

consisted of: (a) the WET, and (b) the WCT (see Appendix G,2).

The Control Groups. The teachers of the experimental groups at each grade level also instructed the students in the control groups, using the regular program suggested in the Curriculum Guide for Alberta Junior High Schools. The teachers indicated that the regular program at the grade eight and nine levels calls for instruction and practice in the following areas: parts of speech; parts of the sentence (subject and predicate); phrases; clauses; verbals; sentences according to meaning (imperative, declarative, exclamatory); sentences according to structure (simple, compound, complex); organization of paragraphs; and writing assignments. Although the grade seven program did not include all these concepts, the teachers adjusted their materials so as to include the concepts taught to the grade eight and nine levels. This procedure ensured the investigator that all students in the control groups received instruction in similar areas of study. Length of lessons, number of lessons per week, number of assignments, and writing practice were similar to those given to the experimental groups. The control groups were asked to write the same pretest and posttest written by the experimental groups.

THE TEACHERS

Three teachers at each grade level were required to participate in the experiment. Each teacher taught one experimental group and one control group. Although this procedure may counterbalance the possibility of teacher personality on either the experimental or the control group, it raises the question as to whether or not teachers are able to switch completely from one procedure to another. Shaver,[155] and Krumboltz and Farquar[156] have demonstrated that teachers can indeed switch from one mode of information to another. Shaver found evidence at the .001 level of significance that teachers differentiate their behavior while using two different kinds of instructional techniques, but that variations within styles may occur.

Instructing the Teachers in the Features of the Rhetoric of the Sentence

After the first draft of the instructional materials was prepared it was reviewed by the investigator's advisor. Further revisions were made after the pilot study was completed and before the instructional materials were printed

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[155] P. Shaver, "The Ability of Teachers to Conform to Two Styles of Teaching," Journal of Experimental Education, Vol. XXXII, Spring 1964, pp. 259-267.

[156] J.D. Krumboltz, and W. Farquar, "A Checklist for Evaluating Experimental Research in Psychology and Education," Journal of Educational Research, Vol. LII, May, 1959, pp. 353-354.

in their final form (see Appendix B, Appendix C, and Appendix D).

The refined version of the instructional materials, the assignments based on each lesson, and the study sentences and paragraphs were given to the teachers of the experimental groups in order that they might familiarize themselves with these materials. A meeting was arranged with the teachers one week later to discuss the materials. At this meeting, the investigator answered questions and clarified some of the concepts included in the instructional materials. The investigator taught two demonstration lessons to the teachers. At this time, the importance of the instructions for teaching the experimental and control groups was emphasized (see Appendix A). Teachers were asked to follow the instructions as closely as possible.

Three days later, another meeting was held with the teachers. At this meeting the group reviewed all the lessons, raising questions, and discussing procedures. Another demonstration lesson on the "Levels of Generality" was taught to the group. Two more meetings followed. At one of these meetings, one more demonstration lesson was taught to the teachers. In the final meeting, the procedures for administering the pretest and the posttest were discussed, and printed instructions for administering the tests were given to all the teachers.

Since the same group of teachers was assigned to teach

the control groups, it was necessary to discuss the instructional procedures to be followed in these groups. All the teachers were familiar with the writing program as outlined in the Curriculum Guide. It was necessary to stress the importance of avoiding the transfer of instructional materials to the control groups, and the importance of following the instructions provided with the instructional materials as closely as possible (see Appendix A).

Arrangements were made to meet with the teachers after the first week of instruction to discuss the work done. The teachers agreed to allow the investigator to "spot check" the teaching procedures during the experiment to see whether or not teachers were in fact avoiding the transfer of materials from experimental to control groups. At least three spot checks were made in each classroom per week. There was no noticeable transfer of instructional materials from the experimental to the control groups.

SELECTION AND CONSTRUCTION OF CRITERION MEASURES

The study required the use of a Written Expressional Test (WET) based on Christensen's features of the rhetoric of the sentence, and a Written Composition Test (WCT).

Procedures for Constructing the WET

Several language development research studies, studies of prose structures and written composition, and several junior high school composition texts were examined in order

to select aspects of sentence construction for effective composition. For the purposes of this study, emphasis was placed on the following: (1) "levels of generality" or "layers of meaning", (2) "recognizing mature sentences", and (3) "sentence combining" through modification, subordination, and coordination. In order to include these general dimensions, as well as the syntactic features of the rhetoric of the sentence, a series of subtests had to be constructed. The test had to be terminology free. The investigator's advisor and several colleagues reviewed the initial items on the test. Each subtest contained nine items.

During the summer of 1969, the first draft was given to students at various levels of the junior and senior high schools in order to determine the length of the test and to obtain some information on the difficulty of the test items. The students tested were not part of the final sample. This initial administration of the test revealed that it required approximately one hour and twenty minutes to complete. The test definitely contained too many items for the one hour time limit. After examining the students' responses on the test the following changes were made:

Subtest I, items 5 and 9 deleted;

Subtest II, items 1 and 4 deleted;

Subtest III, items 8 and 9 deleted;

Subtest IV, items 1 and 7 deleted; and

Subtest V, items 3 and 6 deleted.

These items were deleted because: (1) some contained as many as five levels of generality. Such complex constructions were not included in the instructional materials, and (2) others contained words which created problems in understanding the item, especially at the grades seven and eight levels.

The revised version of the test was administered to six students, two from each of the grades seven, eight and nine levels. All students completed the test in the required time. Students were questioned as to the clarity of instructions, and the difficulty of the vocabulary. When the investigator was assured that the original problems were eliminated, the revised version of the test was printed for use in the pilot study.

Description of the WET

The WET is composed of five subtests. Each subtest deals with various features of the rhetoric of the sentence, and with sentence building and expansion through modification, coordination, and subordination. A description of each subtest follows.

Subtest 1. This subtest requires the students to recognize the basic statement (main or base clause) in the three statements presented, and then to decide on the most effective arrangement for the three statements. This exercise is designed to test students' ability to write sentences rich in meaning, by having them decide first on the general statement, and then on the layers of meaning which might be added

to make the general statement more specific and more precise.

Subtests 2, 3, and 4. These subtests require the students to combine short sentences to form a single, well-organized sentence. Each subtest in this group requires students to combine groups of three or four sentences into a single compact sentence that retains the original meaning. The exercises are designed to test students' flexibility and fluency with language resources in combining given facts and ideas into single, "mature sentences". Each subtest, in addition, requires students to use specific principles of writing.

Subtest 2. This subtest requires students to use a specific syntactic structure. To combine the sentence effectively, students should use the "free verb phrase". This requires the use of a "verb head-word" which transforms the short sentences into "free verb phrases". A parallel series of these syntactic structures will form an "intra-T-unit coordination" structure.

Example: The hunter crept to the clearing. The hunter stopped for a moment. The hunter listened to the call of the she-wolf.

Combined Sentence: The hunter crept to the clearing, stopping for a moment, listening to the call of the she-wolf.

Subtest 3. This subtest requires the students to use the "free noun phrase" or the "appositive", in combining the short sentences. Items 5, 6, and 7 on this subtest provide students with the opportunity to use other syntactic structures,

such as the prepositional phrase, adjective clusters, and verb clusters, in a mixed sequence.

Example: We spoke to the owner of the lodge. The owner of the lodge was a frail man with a tuft of bristly hair. His hair stuck straight up. It was like a rooster's tail.

Combined Sentence: We spoke to the owner of the lodge, a frail man with a tuft of bristly hair, sticking straight up, like a rooster's tail.

Subtest 4. This subtest requires students to use the "free absolute phrase" in combining the short sentences. Items 5, 6, and 7 also provide students with an opportunity to use other syntactic structures in a mixed sequence.

Example: The bear ambled across the campground. The bear held its head high. The bear sniffed the air. The bear's beady eyes rolled from side to side. They looked like brown marbles on a china plate.

Combined Sentence: The bear ambled across the campground, its head held high, sniffing the air, its beady eyes rolling from side to side, like brown marbles on a china plate.

Subtest 5. This subtest requires students to construct a single, well-organized sentence. Each of the seven items provides a "noun head" and students are asked to write a sentence using details, comparison, and description to sharpen the image or the picture of the noun head. This exercise provides an opportunity for students to use their language resources freely.

SCORING THE WRITTEN EXPRESSIONAL TEST

Research Studies Dealing with Children's Language Development and Their Use of Various Syntactic Structures

Research studies dealing with the language development of children have directed attention to some of the syntactic structures children at various age levels and ability levels use, and the frequency with which they use these structures.

Some of these studies done prior to 1960, focused attention on children's use of subordinate clauses. LaBrant, using the subordination index (the frequency of subordinate clauses expressed as a per cent of all clauses), found that children used a large number of subordinate clauses.[157] Bear's analysis of children's written composition revealed a steady increase in the use of complex sentences throughout elementary school, an indication that children use more subordinate clauses as they mature.[158] Watt's study of the mental development, and development of written expression in English, revealed that students were able to use a large number of clauses of reason, or result, although the adjective clause appeared less frequently.[159] Watts lists the

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[157] LaBrant, op. cit., pp. 387-391.

[158] M.V. Bear, "Children's Growth in the Use of Written Language," Elementary English Review, 1939, pp. 312-319.

[159] A.F. Watts, The Language and Mental Development of Children, London: George C. Harrap, 1944, p. 123.

percentages of dependent clauses at the various age levels as follows:

Age	7.8	8.9	9.10	10.11	11.12	12.13	13.14	14.15
%	16.2	22.1	27.40	32.30	36.30	39.50	41.30	43.20

Harrell's investigation of the oral and written stories of children of ages nine and a half, thirteen and a half and fifteen and a half, showed an increase in the use of subordinate clauses with age comparable to Watts' findings, and with findings of LaBrant, Stormzand and O'Shea. Harrell's study further revealed that there was a steady increase in the use of the adjective clause from one age level to the next, and that by the tenth grade students were using it as frequently as the adverbial clause.[160]

On the basis of these research findings, the dependent clause was used as an index of maturity, but weighted scores were given for variety and flexibility of use within the general pattern (see Scoring the Syntactic Structures for further details). As Watts points out, children use prepositional phrases and infinitives, as alternatives to dependent clauses. This tendency to compression, he claims, is a mark of maturity in children's writing.[161]

More recently, investigators such as Loban, Hunt,

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[160] L.E. Harrell, Jr., "A Comparison of the Development of Oral and Written Language in School-Age Children," Child Development Monographs, Vol. XXII, No. 3, 1957, pp. 49-52.

[161] Watts, op. cit., p. 124.

Armstrong, Potter, and Bateman and Zidonis have suggested that future investigators will find more meaning in the way specified syntactic structures are manipulated to achieve flexibility within a pattern, rather than in the general pattern itself. The research studies done by O'Donnell, Griffin, and Norris, Potter, Hunt, and Loban, provide detailed information on the development of a variety of modification structures in children's language.

O'Donnell, Griffin, and Norris noted that in all the grades examined, the single-word noun modifiers were more common than word-group modifiers. (These modifiers are bound modifiers.) They further observe that the prepositional phrase, the relative clause, and the participle or participial phrase were not frequently used.[162] The question arises whether or not students can be taught to use these modification structures more frequently and as "free modifiers".

In his analysis of twenty samples of tenth grade writing, Potter explored some of the grammatical differences between "good" and "poor" writing. He concluded that the good writers proved superior in modifying their objects with prepositional phrases, clauses, and verbal structures. He also observed that the good writers used more verbal structures of every type than did the poor writers.[163] Potter does not distinguish

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[162] R.C. O'Donnell, W.J. Griffin, and R.C. Norris, Syntax of Kindergarten and Elementary School Children: A Transformational Analysis, NCTE Research Report, No. 8, Champaign, Illinois: NCTE, 1967, pp. 59-60.

[163] Potter, op. cit., pp. 17-27.

between free modification structures and bound modification structures. The investigator assumes that Potter's reference is to bound modification structures.

Hunt's investigation of the written composition of students at the grade four, eight, and twelve levels revealed similar findings. Hunt indicated that the most commonly used kind of modification was the single-word modifier. Other modification structures in order of frequency of use were prepositional phrases, verbals, and relative clauses. Of interest to this study is the observation that some phrasal modifiers such as participial and infinitive phrases are much less frequently used than prepositional phrases.[164]

Loban's study of "The Language of Elementary School Children" directs attention to several indices of mature writing. Loban states that although differences in the structural patterns of children's language are not notable, "very important differences do show up in the dexterity with which students use elements within these structures...."[165] This finding on the elements of structural patterns, Loban claims, is one of the most important findings of his study. He insists that it is "not pattern but what is done to achieve flexibility within the pattern proves to be a measure of effectiveness and control of language...."[166] Loban specifies

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[164] Hunt, op. cit., pp. 101-109.

[165] Loban, op. cit., p. 84.

[166] Ibid., p. 84.

the syntactic structures which enable speakers and writers to compress their thought and to communicate effectively. He points out that "infinitives, participial phrases, gerunds, appositives, and other clauses can contribute to compression and effectiveness...."[167] It is interesting to recall Christensen's observation that "mature writers" use these syntactic elements, but they use them as "free modifiers", the elements "within structures" that Loban, Hunt, and other investigators claim are indices of effectiveness and control of language.

This study, therefore, was not concerned with minor features of sentence patterns. Rather, it identified those syntactic elements within patterns that are characteristic of mature writing and assigned values to them. A combination of these values provided a raw score for each student on the WET.

Values Assigned to Syntactic Structures on the WET

(1) Subtest 1

1 point was given for the first level of generality in correct sequence.

3 points were given for the second level of generality in correct sequence.

Example: a. looking over his shoulder
b. he walked swiftly across the park
c. as if he were afraid

b	c	a
0	1	3

[167] Ibid., pp. 59-61.

(2) Subtests 2, 3, 4, and 5

(a) All adjective clusters were tallied as follows:

1 point for each adjective cluster used as a free modifier.

Example: He screamed with uplifted eyebrows and a wide open mouth -- incredibly wide, black, enormous, full of teeth -- comical.
- Conrad

(b) All dependent clauses were tallied as follows:

2 points for each dependent clause not set off.

Example: He came when the bell rang.

3 points for a dependent clause used to add a detail or a comparison not set off.

Example: His eyes became fixed and thoughtful as if he were reading in a poor light.

4 points for a dependent clause used to add a detail or a comparison which is set off; the clause is a sentence modifier.

Example: His walk was belly-heavy, as if he had to remind himself not to step on his own feet. - Saul Bellow

(c) All prepositional phrases were tallied as follows:

2 points for each prepositional phrase not set off.

Example: He ran across the street.

4 points for each prepositional phrase used to add a detail or a comparison not set off.

Example: The storm had rolled away to faintness like a wagon crossing a bridge.
- Endora Welty

6 points for each prepositional phrase used to add

a detail or a comparison which is set off.

Example: He moved slowly and deliberately, like a man with his mind made up.
- W.V.T. Clark

(d) All verb phrases were tallied as follows:

5 points for each verb cluster not set off.

Example: He enjoys reading books.

8 points for each verb cluster which is set off; the verb cluster is a sentence modifier.

Example: The gull glides in the warm up-currents for hours, searching the water below, climbing high against the sky, descending like a flash in search of its food.

(e) All noun clusters or appositives were tallied as follows:

10 points for each noun cluster or appositive used as a free modifier.

Example: She could smell it now too, the wonderful exciting smell of coming rain.
- Shirley A. Grau

(f) All absolute phrases were tallied as follows:

12 points for each absolute phrase used as a free modifier.

Example: She stood there waiting for him, her legs far apart, her hands jammed down into the pocket of her light coat, the rays of the street light falling whitely across her loose hair.

(g) 1 point was given to each sentence correctly combined.

This rating scale was established in order to ensure objectivity in marking the WET.

Frequency Counts on the WET

Frequency counts were made on the total number of free noun phrases, free verb phrases, free adjective phrases, free prepositional phrases, free absolute phrases, and on the total number of intra-T-unit coordination structures used by students in the experimental and control groups on the WET and its subtests (see pages 108 to 109).

VALIDITY OF THE WET

All the features of Christensen's rhetoric of the sentence that were included in the instructional materials for the experimental groups at the grade seven, eight, and nine levels were tabulated. The language texts suggested in the Curriculum Guide for Junior High Schools in Alberta were also examined and grammatical structures similar to those cited in the rhetoric of the sentence were listed. The test items were then constructed using the prepared list of syntactic structures.

Three colleagues were provided with the first draft of the WET, with copies of Christensen's article on the Generative Rhetoric of the Sentence, with the list of syntactic structures from the suggested texts, and with the instructional materials, and asked them to evaluate the content of the test. The investigator's advisor also examined the test and judged it for its representativeness of the items. The test was subsequently revised and a draft for use in the pilot study was prepared.

RELIABILITY OF THE WET

The reliability of the final form of the WET was established by the test-retest method. The test was administered on two occasions set one week apart, to thirty grade eight students. Attempts were made to administer the test under identical conditions. Ten students were randomly selected and rank order correlation coefficients were computed from their raw scores. The raw scores are included in Appendix K. Table V indicates that all the subtests were found to be significant ($p < .01$). In addition, Table V shows a Test-Retest Reliability for the WET as a whole of .96 ($p < .01$).

TABLE V

WRITTEN EXPRESSION TEST: RELIABILITY COEFFICIENTS

Subtests	r_{rho} Coefficients
A	.93*
B	.96*
C	.98*
D	.99*
E	.91*
Subtest Total Reliability	.96*

* $p < .01$

Constructing the Written Composition Test

The study required the use of a pre-essay and a post-essay test. In each test students were asked to write three one-paragraph essays on two successive days. Three modes of writing (narrative, descriptive, and expository) were assigned.

There are many variables associated with essay writing. It is a difficult task to control all of them but an effort has been made to establish reasonable control over the major ones. The following paragraphs examine some of these variables and explain the procedures that were followed to control their effects.

The Writer Variable

Some investigators have shown that the writing performance of individuals varies from day to day. Kincaid discovered that this was especially true of the better writers. He maintains that a single paper written by a student on a given topic cannot be considered a valid basis for evaluating the student's achievement. Kincaid claims that even if the student's writing ability was low, "a single paper would not provide an infallible basis for such an evaluation."[168] A similar observation was made by C.C. Anderson who found that the students she examined on eight different occasions "showed

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[168] Gerald Kincaid, "Some Factors Affecting Variation of Students' Writing." Unpublished Ed. D. dissertation, Michigan State University, 1953, p. 92.

evidence of composition fluctuation."[169] Diederich [170] and Traxler and Anderson[171] also point to the writer variable.

To minimize the effects of the writer variable, Braddock suggests that the "student should write at least twice, once on at least two different occasions, the rating of the better paper being used as a measure of his writing performance."[172]

In this study the students were assigned three paragraphs on both the pre and posttests. The students wrote these paragraphs on three successive days, using three forty minute periods. The combined scores obtained on the three paragraphs constituted a measure of the student's writing performance.

The Assignment Variable

Godshalk, et al. claim that if students are assigned several topics from which one or two could be chosen the student's rating might depend more on the topic he chose than on how well he wrote.[173] To control the effects of the topic on the quality of writing, the investigator assigned a single

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[169] C.C. Anderson, "The New STEP Essay as a Measure of Composition Ability," Educational and Psychological Measurement, Vol. XX, Spring 1960, pp. 95-102.

[170] P.B. Diederich, "The Measurement of Skill in Writing," School Review, Vol. LIV, December, 1946, pp. 585-587.

[171] A.E. Traxler, and H.A. Anderson, "The Reliability of an Essay Test in English," School Review, Vol. XLIII, Sept., 1935, pp. 534-539.

[172] Braddock, et al., op. cit., p. 6.

[173] Godshalk, et al., "The Measurement of Writing Ability," New York: CEEB, 1966, p. 13.

topic in each of the three modes of writing on the pre and post WCT. This procedure raises the question of whether or not the investigator can in fact select topics that are of interest to the students and are within their experience and comprehension. The investigator used the following procedures to reduce the effects of the assignment variable:

(1) During the summer and fall of 1969, the investigator collected from teachers a list of topics which they had assigned to their classes in previous years and with which they had had fairly reasonable success. The investigator also interviewed several students at the grades seven, eight, and nine levels and obtained from them an expressed interest in the topics on which they would like to write. The topics were categorized so that they fell into broad subject areas. The most popular were topics dealing with human beings. The list of topics was reduced to twelve, four in each of the three modes of writing -- narrative, descriptive, and expository.

(2) In the pilot study conducted in Alberta, 1969, students at the grade seven, eight, and nine levels were asked to write three paragraphs, one on each mode of writing. Students were given four topics in each of the modes of writing and from these topics the students were asked to choose one on which to write their paragraphs. The students' paragraphs were then examined and the two most popular topics in each mode of writing were selected for use in the final study.

(3) The two topics in each mode were randomly assigned to pre and posttest.

(4) The selection of the modes of discourse, narrative, descriptive, and expository, was prompted by the fact that Christensen uses these modes of writing in explicating his theory. Furthermore, the Curriculum Guide specifies narrative, descriptive, and expository paragraphs as modes of writing for junior high school students in Alberta.

Description of the Essay Test

The Essay Test required students to write three pretest paragraphs and three posttest paragraphs as follows:

Pretest:

(a) Descriptive paragraph

Topic: "My Favorite T.V. Character"

(b) Narrative paragraph

Topic: "An Automobile Accident"

(c) Expository paragraph

Topic: "Why I Like a Particular Music Group", or "Why I Dislike a Particular Music Group"

Posttest:

(a) Descriptive paragraph

Topic: "My Favorite Real Person"

(b) Narrative paragraph

Topic: "A Fire"

(c) Expository paragraph

Topic: "Why I Like a Particular Sport or Game", or

"Why I Dislike a Particular Sport or Game"

Instructions for administering the test and instructions to students writing the test are included as Appendix E2 and Appendix E3 respectively. The Essay Test is included in the study as Appendix G.

Scoring the Written Composition Test

The three pretest essays and the three posttest essays written by students were subjected to two kinds of analysis:

(1) frequency counts,

(2) subjective or global rating by a panel of judges.

Frequency Counts

All the paragraphs written by the final sample of students in the experimental and control groups were examined with regard to several established criteria that had been found by other investigators (Hunt, Loban, O'Donnell, Potter and Bateman and Zidonis) to differentiate between mature and immature writing. The following criteria were used in making the frequency counts at each level:

(1) T-unit length

Total number of words in WCT (18 T-units)

Average number of words per T-unit

(2) Free Modifiers

Total free modifiers in 18 T-units

(3) Frequency of use of specific free modifiers

(a) Total free noun phrases in 18 T-units

(b) Total free prepositional phrases in 18 T-units

(c) Total free verb phrases in 18 T-units

(d) Total free adjective phrases in 18 T-units

(e) Total free absolute phrases in 18 T-units

(4) Total number of intra-T-unit coordination structures in 18 T-units

(5) Total number of words in base clauses

Average number of words per base clause

Procedures Used in Making the Frequency Counts for the Criteria Listed

Several studies dealing with the development of students' language have typically included some description of connected speech and writing samples in terms of the amount of verbal output and grammatical complexity of sentences used. McCarthy,[174] Day,[175] and Templin[176] in studying the language development of students, used fifty responses made by their subjects. These researchers seem to agree that this number of responses would give a fairly representative sample of the

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[174] Dorothea McCarthy, "The Language Development of the Preschool Child," Institute of Child Welfare, Monograph Series, No. 4, Minneapolis: University of Minnesota Press, 1930.

[175] E.J. Day, "The Development of Language in Twins: A Comparison of Twins and Single Children," Child Development, No. 3, 1932, pp. 179-199.

[176] M.C. Templin, "Certain Language Skills in Children, Their Development and Interrelationships," Institute of Child Welfare Monograph Series, No. 26, Minneapolis: University of Minnesota, 1957, p. 15.

individual's language development in a short period of time.[177] In his analysis of a mature style, Christensen[178] used 50 T-units. Williams[179] used 40 expression units and he considered this number to constitute a fairly representative sample of the individual's control over language.[180] Schneiderman used for her measure of sentence length the mean length of only fifteen sentences. It would seem that there is no set pattern of the number of responses researchers should analyze. One can conclude, nevertheless, that if the number of responses is increased the reliability of the structural measures will also increase. However, Darley and Moll[181] report that the differences between the means for the mean length of response (MLR) and the structure complexity score (SCS) for responses of seven different sizes (5, 10, 15, s0, 35, 35, and 50 responses) are quite small. The range of "mean MLR scores is from 5.54 words to 5.87 words, while the range of mean SCS values is from 39.45 points to 41.18 points."[182] They

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[177] McCarthy, op. cit., p. 32.

[178] Christensen, "The Problem of Defining A Mature Style," 1968.

[179] H.M. Williams, "An Analytical Study of Language Achievement in Preschool Children," Child Welfare, Vol. XIII, No. 2, Part I, 1937, p. 10.

[180] N. Schneiderman, "A Study of the Relationship Between Articulatory Ability and Language Ability," Journal of Speech and Hearing Research, Vol. XX, 1955, pp. 359-364.

[181] F.L. Darley, and K.L. Moll, "Reliability of Language Measures and Size of Language Samples," Journal of Speech and Hearing Research, Vol. III, No. 2, 1960, pp. 166-173.

[182] Ibid., p. 170.

conclude that "on the basis of these data it appears that for a group of subjects the group mean would remain essentially the same regardless of the number of responses on which the scores are based."[183]

Before the frequency counts were made, all the paragraphs written by students were examined to determine the number of T-units in each paragraph. Over all three grades the range of T-units varied from six to fifteen. Because the design of the study called for comparisons among groups of students by grade level and ability level, it was decided to make the frequency counts on a sample of six T-units for each mode of writing, thus providing a total of eighteen T-units for each student. For those students whose paragraphs exceeded six T-units, the investigator selected the first two T-units, the middle two T-units, and the last two T-units. For those students whose paragraphs contained six T-units, the investigator used the entire paragraph. Thus, from each student in the sample, eighteen T-units were selected for making the frequency counts. It was felt that this number of T-units provided a fairly representative sample of the syntactic structures the students were able to select and use in their writing. Also, the blocks of T-units selected from the beginning, the middle, and the end of the paragraphs provided some continuity in the students' writing.

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[183] Ibid., p. 170.

The investigator counted and recorded all the syntactic units used by the students. After completing the frequency counts, every twentieth paper was rechecked by the investigator. A further check on the accuracy of the investigator's counts was made by two of the teachers involved in the study. No discrepancy was found in the counts made by the investigator and the recheck made by the classroom teachers. Appendix L contains all the relevant data obtained from the frequency counts.

SUBJECTIVE OR GLOBAL RATING BY JUDGES

Selection of the Judges

To select competent judges to rate the students' paragraphs, the investigator interviewed two junior high school principals, and two coordinators of English in the Edmonton Public School system in order to obtain information on teachers of English who might have the necessary qualifications. After interviewing several teachers, three were selected. These teachers indicated that they were willing to devote the time necessary to rate each of the 648 paragraphs. A further interview was held with one of the coordinators who recommended two of the teachers without reservation. The recommendation appears as Appendix I in this study. Although a written recommendation was not available for the third teacher, he was also highly recommended in a verbal interview with the principal of the school

in which he taught.

Qualifications of Judges

The three judges used in this study were all experienced junior high school teachers of English. Table VI presents certain defining characteristics of the three judges.

TABLE VI

EXPERIENCE OF JUDGES

Judges	Teaching Experience		Related Experience
	High School	J.H. School	
A	-	10	
B	-	4	3 years marking grade nine departmental exams in Composition
C	4	4	4 years marking grade twelve departmental exams in Composition
Average	6.66		

All judges indicated that they had used various approaches to evaluating students' writing, and that all had used the global method of rating in their own classrooms. One further precaution was taken before a decision was made to use the three judges. Each judge was asked to rate five paragraphs on a four-point scale using the global method. Three of the paragraphs were written by professional writers, and two were written by grade nine students. Four of the

paragraphs contained free modifiers and one had none. All were descriptive paragraphs. Before rating the paragraphs, the judges were asked to read and follow the instructions presented as Appendix H in this study. The scores given to the paragraphs appear in Appendix J. Pearson Product Moment Correlations were run in order to check the reliability among the judges. Table VII presents the intercorrelations among the judges.

TABLE VII

INTER-CORRELATIONS AMONG THE JUDGES

Judges	A	B	C
A		.846*	.846*
B			1.00**

* $p < .10$
** $p < .01$

In view of (1) the agreement among the judges in evaluating the paragraphs, (2) the experience of the judges, and (3) the recommendations concerning the judges, the investigator felt that they were competent to evaluate the students' paragraphs.

Selection of Samples of Students' Writing

For the reasons indicated on page 79, fifty per cent of all the paragraphs written by students in the experimental and control groups at each of the three grade levels were

subjected to a global rating by the three judges. The paragraphs written by the students in the high, mid and low ability subgroups were selected as these groups made up fifty per cent of the paragraphs written by the experimental and control groups at each of the three grade levels. The three modes of writing, description, narration, and exposition, were evenly represented in the evaluation. The distribution was as follows: 108 paragraphs (54 pre, and 54 post) per experimental group per grade level; 108 paragraphs (54 pre, and 54 post) per control group per grade level; a total of 216 paragraphs per grade level; a grand total of 648 paragraphs for global rating from the grade seven, eight, and nine levels.

Procedures for Rating the Paragraphs

The pretest and posttest paragraphs of the sample chosen from the experimental and control groups were coded and recorded by grade level. The paragraphs at each level were then placed in random order and were given to the judges in the order indicated on page 116. Each judge was given a set of instructions for rating the paragraphs (see Appendix H). Each judge rated the paragraphs independently in his own home, and was asked to complete the rating over a period of one week. All judges completed the rating within the specified time.

Judges were asked to make a judgment based on their subjective overall impression of the paragraphs. They were

asked to read each paragraph rapidly for a total impression and then assign a rating from 1 to 4 on each paragraph. The investigator provided the judges with an interpretation of the scale as presented by Myers, McConville, and Coffman:

(1) obviously below a reasonable standard,

(2) not sufficient promise or competence to be considered in the upper half,

(3) clearly competent, promise of effective performance,

(4) superior, not perfect but very good; effective.[184]

The judges were asked to rate each paper on its own merits without concern for a normal distribution of the scores. The three judges used the following prearranged sequence:

(1) Judge A rated all paragraphs written by the experimental and control groups and recorded his rating on a coded sheet. The paragraphs were then given to Judge B who read them independently and in the same sequence. He recorded his rating on a separate recording sheet. Judge C followed the same procedure.

(2) When Judge A completed rating the grade seven papers, they were collected and given to Judge B. Judge A was then given the paragraphs written by the experimental and control groups in grade eight. When Judge B completed rating the grade seven paragraphs they were collected and given to

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[184] A.E. Myers, C.B. McConville, and W.E. Coffman, "Simple Structure in the Grading of Essays," Educational and Psychological Measurement, Vol. XXVI, 1966, pp. 41-43.

Judge C who recorded his rating on a separate coded sheet. Thus each sample of writing was given three independent ratings. The same procedures as followed in grade seven applied to grade eight and grade nine.

The combined rating of all the judges, three scores on each mode of writing were used as a measure of the students' writing performance on the WCT. Because there were three scores for each paragraph ranging from a possible three "1 s" to three "4 s", the combined scores on each paragraph could range from 3 to 12, and on each set of three paragraphs written by a student the scores had a possible range of 9 to 36. The combined scores of three judges on the pre and post WCTs are presented in Appendix N.

PILOT STUDY

A pilot study was conducted in October, 1969, in a junior high school in Edmonton, Alberta, for the following purposes:

(1) to obtain information from teachers regarding the appropriateness of the instructional materials for each grade level (length of lessons, adequacy and appropriateness of examples).

(2) to obtain information on the appropriateness and clarity of instructions to teachers and students.

(3) to determine the length of time required to complete the test, and to ascertain the level of difficulty

of the test items.

(4) to investigate the problem of selecting topics for the WCT.

Three teachers at the grade seven, eight, and nine levels participated in the study. Each teacher taught one control and one experimental group for a period of one week. The lessons based on the "Introduction to the Free Modifier", "The Principle of Addition", "The Direction of Movement", the "Levels of Generality", and "Texture", were taught to the experimental group. The control groups followed the regular program suggested in the Curriculum Guide for junior high school students in Alberta.

The investigator met with the department head on several occasions and discussed procedures for teaching the lessons and administering the pre and posttests. Teachers were asked to suggest ways of improving the instructional materials, and to comment on the length of the test and the clarity of instructions for administering and writing the tests.

Another meeting with the department head followed the administration of the posttest, and he made the following observations:

(1) the instructional materials were appropriate for each grade level. (The time required to teach each lesson fitted the forty minute pattern, and the examples were adequate and appropriate.)

(2) instructions to teachers and students were clearly stated. However, a suggestion was made to include further instructions for the students writing the pre and post WCT. The investigator then met with the teachers participating in the actual study and sought their advice on the problem. They agreed that additional instructions would be of help to all students. The instructions placed below the topics in the pre and posttests were subsequently added (see Appendix G).

(3) the sixty minute time limit on the WET was adequate, and the forty minute period for each paragraph was also adequate.

From an examination of all the essays written by the students in the experimental and control groups in the pilot study, the investigator selected the topics which appear in Appendix G, for use in this study.

RETENTION TEST

A retention test consisting of the WET and a narrative-descriptive paragraph (An Automobile Accident) were administered to students in the experimental groups at the grade seven, eight, and nine levels, on March 16, 1970. The test was administered for two purposes: (a) to investigate whether or not the students given instruction in the features of the rhetoric of the sentence were able to retain them; and (b) whether or not these students were able to use the

concepts in a writing situation after an elapsed period of three months. The tests were administered under similar conditions to the pre and posttests in the experiment. The students selected for this part of the analysis were the same group of students designated high, mid, and low ability subgroups at the grade seven, eight, and nine levels. The raw scores obtained by students on the Retention Test (WET and WCT) are presented in Appendix O, and in Appendix P respectively.

TREATMENT OF THE DATA

The investigator made use of the Division of Educational Research Services of the University of Alberta in analyzing the data.

The data were analyzed statistically by using a three-way analysis of covariance.[185] This design, diagrammed in Figure II, provided for the extraction of variance due to grades, treatment, ability level, and all the multiple interactions among the variables.

Appropriate sub analyses were conducted to clarify the nature of the more complex relationships. For example, frequency counts of the occurrence of specific syntactic structures listed on pages 108 to 109 are reported in terms of group means or rates of occurrence per eighteen T-units.

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[185] B.J. Winer, Statistical Principles in Experimental Design, New York: McGraw-Hill Book Co., 1962, pp. 578-621.

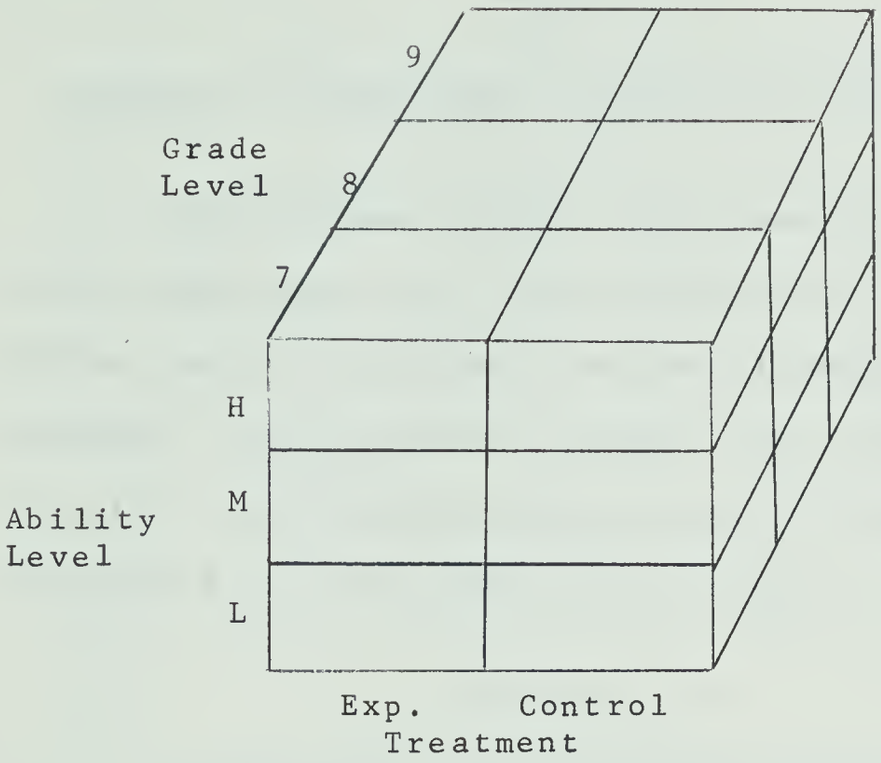

FIGURE II

RESEARCH DESIGN USED IN STUDYING THE WRITTEN LANGUAGE OF STUDENTS AT THREE GRADE LEVELS

SIGNIFICANCE LEVEL

The level of significance used throughout the investigation was the 0.05 level.

CHAPTER IV

ANALYSIS OF THE DATA: RESULTS AND INTERPRETATIONS

The previous chapter described the research design of the experiment and the procedures for gathering and analyzing the data derived from the students' use of and control of language. This chapter presents the results of the analysis. To guide the investigation, a series of null hypotheses were formulated and are dealt with in turn.

HYPOTHESIS 1a

> Students in the experimental group in grades seven, eight, and nine will not achieve significantly higher mean scores on the post Written Expressional Test and its subtests, than students in the control group at the same grade levels when pretest performance is used as a covariate.

Tables VIII and IX present by treatment, by grade and by ability, the means and standard deviations of the scores obtained by the students on the pre and post WET and its subtests.

A three-way analysis of covariance (with the pretest scores used as the covariate) was carried out to determine any significant differences and interactions among the main factors (treatment, grade, ability). Table X presents the results of this analysis.

The results indicated that (1) the experimental group achieved a significantly higher mean posttest score (326.72)

TABLE VIII

MEANS AND STANDARD DEVIATIONS BY GRADE, AND BY ABILITY, FOR THE EXPERIMENTAL GROUP ON THE WET AND ITS SUBTESTS

Gr.	N	Ability		Pre WET					Post WET				
				1	2	3	4	5	1	2	3	4	5
7	12	H	$\bar{X}$	16.25	13.33	28.17	31.83	13.75	27.08	125.08	71.00	83.67	97.25
			SD	5.96	7.03	16.15	14.35	12.90	4.46	29.58	30.34	36.33	47.29
	12	Mid	$\bar{X}$	13.33	8.83	23.00	27.50	19.67	23.83	92.25	59.67	73.58	96.17
			SD	3.77	9.15	12.01	16.99	12.98	5.46	42.46	25.81	47.51	69.35
	12	Low	$\bar{X}$	10.67	9.00	15.17	26.75	5.33	23.42	83.50	53.00	80.42	107.50
			SD	3.77	9.44	13.17	22.93	6.82	5.04	37.55	30.09	30.41	53.99
Total	36		$\bar{X}$	13.42	10.39	22.11	28.70	12.92	24.78	100.28	61.22	79.22	100.31
			SD	5.15	8.86	14.88	18.58	12.72	5.27	41.03	29.77	38.97	57.85
8	12	H	$\bar{X}$	17.75	29.92	12.33	50.83	18.25	29.42	114.83	71.08	102.08	145.33
			SD	6.06	20.01	11.21	20.50	9.17	8.48	27.73	31.49	41.36	39.06
	12	Mid	$\bar{X}$	16.33	30.50	11.92	37.08	11.58	22.25	102.75	58.50	107.83	94.08
			SD	7.97	25.67	12.63	18.79	10.08	5.46	36.79	30.28	22.51	67.94
	12	Low	$\bar{X}$	9.83	26.50	10.50	24.67	9.92	25.17	112.67	67.58	70.17	99.33
			SD	6.71	15.40	11.33	19.15	7.82	5.76	36.25	27.78	27.17	43.66
Total	36		$\bar{X}$	14.64	28.97	11.58	37.53	13.25	25.61	110.08	65.72	93.36	112.92
			SD	7.76	20.86	11.77	22.23	9.76	5.80	34.25	30.36	35.49	56.68
9	12	H	$\bar{X}$	18.25	65.92	18.67	65.17	44.08	31.00	128.42	94.83	128.17	155.17
			SD	5.64	37.84	19.05	24.93	20.27	2.58	24.53	31.12	28.13	54.42
	12	Mid	$\bar{X}$	17.17	46.83	15.83	40.50	38.17	25.83	132.67	82.17	121.08	148.50
			SD	5.42	24.52	15.11	24.49	20.01	3.72	24.98	23.23	17.35	41.57
	12	Low	$\bar{X}$	12.00	37.25	12.17	39.33	23.67	25.25	112.17	61.17	110.83	126.00
			SD	4.32	31.82	17.81	19.32	15.41	5.75	27.12	25.14	34.89	64.59
Total	36		$\bar{X}$	15.81	50.00	15.55	48.33	35.30	27.36	124.42	79.39	120.03	143.22
			SD	5.84	34.02	17.60	25.95	20.57	4.95	27.05	30.10	28.64	55.76

TABLE IX

MEANS AND STANDARD DEVIATIONS BY GRADE, AND BY ABILITY, FOR THE CONTROL GROUP ON THE WET AND ITS SUBTESTS

Gr.	N	Ability		Pre WET					Post WET				
				1	2	3	4	5	1	2	3	4	5
7	12	H	$\bar{X}$	15.16	35.83	16.33	34.33	19.00	14.83	50.75	24.08	32.67	15.00
			SD	6.68	22.53	16.49	16.68	10.92	5.79	35.70	13.79	21.88	15.75
	12	Mid	$\bar{X}$	13.92	35.33	6.50	26.25	15.17	12.42	27.67	13.83	19.33	14.00
			SD	9.05	23.48	7.71	14.42	10.99	5.66	25.03	12.36	14.33	14.38
	12	Low	$\bar{X}$	12.25	30.17	2.67	17.83	11.50	14.67	32.92	5.33	21.25	8.42
			SD	4.78	20.99	5.75	12.08	8.19	6.87	30.37	7.68	12.23	6.29
Total	36		$\bar{X}$	13.78	33.78	8.50	26.14	15.22	13.97	37.11	14.42	24.42	12.47
			SD	7.16	22.51	12.44	16.00	10.57	6.23	32.23	13.89	17.68	13.16
8	12	H	$\bar{X}$	18.75	58.83	25.92	47.83	19.75	19.58	64.33	23.25	55.08	27.75
			SD	7.71	27.25	19.42	36.81	12.13	5.17	24.99	14.90	27.47	17.53
	12	Mid	$\bar{X}$	17.00	30.33	10.83	31.92	19.42	16.83	46.00	19.75	40.67	15.50
			SD	4.83	23.08	10.85	27.95	10.54	4.71	30.36	19.46	31.03	9.99
	12	Low	$\bar{X}$	15.00	36.17	8.00	40.58	19.08	11.42	39.58	15.67	50.92	23.08
			SD	7.39	29.59	10.36	15.00	20.97	7.51	32.72	13.21	21.17	14.10
Total	36		$\bar{X}$	16.92	41.78	14.92	40.11	19.42	15.95	49.97	19.56	48.89	22.11
			SD	6.94	29.45	16.21	28.80	15.26	6.83	31.34	16.37	27.54	15.08
9	12	H	$\bar{X}$	22.83	60.75	14.83	53.75	35.33	23.25	60.92	25.50	58.00	38.75
			SD	3.80	21.58	16.98	13.91	19.01	3.27	23.91	14.61	18.08	22.04
	12	Mid	$\bar{X}$	18.83	39.67	8.92	36.58	21.58	18.17	48.33	15.67	51.08	23.75
			SD	3.18	24.56	11.54	13.72	18.04	5.42	18.49	17.24	24.08	13.40
	12	Low	$\bar{X}$	16.33	50.08	14.00	41.25	26.67	19.00	57.00	22.08	62.00	30.83
			SD	5.12	24.99	11.99	20.36	13.22	6.38	30.09	15.57	24.25	17.58
Total	36		$\bar{X}$	19.33	50.17	12.58	43.86	27.86	20.14	55.42	21.08	57.03	31.11
			SD	4.91	25.27	13.97	17.83	17.87	5.65	25.18	16.36	22.78	19.03

TABLE X

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE WET: TOTAL

Source	SS	df	MS	F	P
Treatment	425209.0	1	425209.0	613.06	0.00*
Grade	16974.4	2	8487.20	1.22	0.30
Treat. x Grade	10033.1	2	5016.54	0.72	0.49
Ability	73983.6	2	36991.8	0.53	0.005*
Grade x Ability	16725.6	4	4181.41	0.60	0.66
Treat. x Ability	9565.28	2	4782.64	0.70	0.50
Treat. x Grade x Ability	14797.5	4	3699.37	0.53	0.71
Cov. 1	339039.0	1	339039.0	0.49	0.00*
Error	13663.7	197	6935.88		

*p < .05

than the control group (45.04) on the WET (when adjusted mean scores* were compared), (2) the three ability levels differed significantly in their performance on the post WET, and (3) there was no significant difference in the performance of the three grade levels on the post WET.

When multiple pairwise comparisons were carried out on the ability factor, it was found that (1) the high ability group (adjusted mean score 211.4) differed significantly from the low ability group (adjusted mean score 160.1), (2) there were no significant differences between the high ability

* All contrasts including the multiple comparison tests for the WET, its subtests, and the WCT use the adjusted mean scores determined in the analysis of covariance, in which the pretest scores served as the covariate.

group and mid ability group (adjusted mean score 185.5), and (3) there was no significant difference between the mid ability group and the low ability group in their performance on the post WET.

Table X also indicated that there were no significant interactions among the main factors.

A significant difference was found among the groups in the concomitant variable, namely the Written Expressional pretest. The source of variance represented by the covariate was eliminated by the adjustment of post Written Expressional test scores for differences in pretest performance.

Analysis of the Subtests

The WET is composed of five subtests. A three-way analysis of covariance was performed on each of the subtests. The results are presented under the appropriate headings.

Subtest 1. This subtest required the students to select the basic statement (main or base clause) in the statements presented, and then to decide on the most effective arrangement for the added layers of meaning. This exercise was designed to test students' ability to write sentences rich in meaning by having them add layers of meaning to make the general statement more specific and more precise. Table XI presents the results of this analysis.

The results of this analysis indicated that (1) the experimental group achieved a significantly higher adjusted

TABLE XI

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE WET: SUBTEST 1

Source	SS	df	MS	F	P
Treatment	4965.41	1	4965.41	175.15	0.00*
Grade	549.70	2	274.85	9.70	0.00*
Treat. x Grade	47.76	2	23.88	.84	.43
Ability	422.24	2	211.12	7.45	0.00*
Grade x Ability	100.97	4	25.24	.89	.47
Treat. x Ability	76.75	2	38.37	1.35	.26
Treat. x Grade x Ability	254.16	4	63.54	2.24	.07
Cov 1	448.72	1	448.72	15.83	.00*
Error	5584.81	197	28.35		

* $p < .05$

mean score (22.35) than the control group (12.61) on post Subtest 1, (2) the three grade levels differed significantly in their performance on post Subtest 1, and (3) there was a significant difference in the performance of the ability levels on post Subtest 1.

When multiple pairwise comparisons were carried out on the grade factor, it was found that grade seven students achieved significantly lower mean scores (15.1) than students in grade eight (18.97), and students in grade nine (17.86) on post Subtest 1. There was no significant difference in the performance of grade eight and grade nine students.

When multiple pairwise comparisons were carried out on the ability factor, it was found that (1) the high ability group achieved a significantly higher mean score (19.02) than the low ability group (15.47) on post Subtest 1, (2) the mid ability group achieved a significantly higher mean score (18.16) than the low ability group on post Subtest 1, and (3) there was no significant difference in the performance of the high ability and mid ability groups in Subtest 1.

Table XI indicated that there were no significant interactions among the major factors.

A significant difference was found among the groups in the concomitant variable, namely the Written Expressional (Subtest 1) pretest. The source of variance represented by the covariate was eliminated by the adjustment of post Written Expressional (Subtest 1) test scores for differences in pretest performance.

Subtest 2. This subtest required students to combine groups of three or four short sentences into a single well-organized sentence. This process involved the use of a "verb head-word" which transforms the single sentences into "free verb phrases". Table XII presents the results of the analysis of Subtest 2.

The results indicated that (1) the experimental group achieved a significantly higher mean score (97.69) than the control group (27.97) on post Subtest 2, and (2) the three grade levels differed significantly in their performance on

TABLE XII

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE WET: SUBTEST 2

Source	SS	df	MS	F	P
Treatment	246265.0	1	246265.0	277.11	0.0*
Grade	5573.32	2	2786.66	3.14	.045*
Treat. x Grade	302.18	2	151.09	.17	.84
Ability	1994.18	2	997.09	1.12	.33
Grade x Ability	7279.17	4	1819.79	2.05	.09
Treat. x Ability	579.38	2	289.69	.33	.72
Treat. x Grade x Ability	4228.86	4	1057.22	1.19	.31
Cov. 1	25884.0	1	25884.0	29.13	.00*
Error	175074.0	197	888.70		

* $p < .05$

post Subtest 2.

When multiple pairwise comparisons were carried out on the grade factor it was found that (1) students in grade eight achieved a significantly higher mean post subtest score (65.3) than students in grade seven (55.2), (2) students in grade nine achieved a significantly higher mean post subtest score (67.1) than students in grade seven, and (3) there was no significant difference in the performance of students in grades eight and nine in the post Subtest 2.

Table XII also indicated that there were no significant interactions among the major factors.

A significant difference was found among the groups in the concomitant variable, namely the Written Expressional

(Subtest 2) pretest. The source of variance represented by the covariate was eliminated by the adjustment of post Written Expressional Subtest scores for difference in pre-test performance.

Subtest 3. This subtest required students to combine groups of three or four short sentences into a single, well-organized sentence. This exercise was designed to test the students' ability to transform one or more of the single sentences into "free noun phrases" or "appositives". This subtest also provided the student with an opportunity to use other syntactic structures (free prepositional phrases, free adjective clusters, free verb clusters) in a mixed sequence. Table XIII presents the results of the analysis of Subtest 3.

The results showed that (1) the experimental group achieved a significantly higher mean score (62.38) than the control group (13.68) on post Subtest 3, (2) the three grade levels differed significantly in their performance on post Subtest 3, and (3) there was a significant difference in the performance of the three ability groups on post Subtest 3.

When multiple pairwise comparisons were carried out on the grade factor, it was found that (1) students in grade nine achieved a significantly higher mean score (42.5) than students in grade seven (32.0) on post Subtest 3, (2) students in grade eight achieved a significantly higher mean post subtest score (39.4) than students in grade seven (32.0) on Subtest 3, and (3) there was no significant difference in the performance of

TABLE XIII

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE WET: SUBTEST 3

Source	SS	df	MS	F	P
Treatment	124903.0	1	124903.0	235.11	.00*
Grade	4012.73	2	2006.36	3.78	.02*
Treat. x Grade	941.47	2	470.73	.89	.41
Ability	6015.73	2	3007.87	5.66	.00*
Grade x Ability	1637.07	4	409.27	.77	.55
Treat. x Ability	2209.56	2	1104.78	2.08	.12
Treat. x Grade x Ability	2606.10	4	651.52	1.23	.30
Cov. 1	6254.88	1	6254.89	11.77	.00*
Error	104657.0	197	531.26		

* $p < .05$

grade eight and grade nine students on post Subtest 3.

When multiple pairwise comparisons were carried out on the ability factor, it was found that (1) the high ability group achieved a significantly higher mean score (44.1) than the low ability group (31.2) on post Subtest 3, (2) the mid ability group achieved significantly higher mean post subtest scores than the low ability group, and (3) there was no significant difference between the high ability and mid ability groups in their performance on post Subtest 3.

Table XIII showed that there were no significant interactions among the major factors.

A significant difference was found among the groups in the concomitant variable, namely the Written Expressional

(Subtest 3) pretest. The source of variance represented by the covariate was eliminated by the adjustment of post Written Expressional Subtest scores for differences in pre-test performance.

Subtest 4. This subtest required the students to combine groups of three or four sentences into a single well-organized sentence. This subtest was designed to test the students' ability to transform one or more of the single sentences into "free absolute phrases". Opportunity was provided for the use of other syntactic structures in a mixed sequence. Table XIV presents the results of the analysis of Subtest 4.

TABLE XIV

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE WET: SUBTEST 4

Source	SS	df	MS	F	P
Treatment	153050.0	1	153050.0	210.25	.00*
Grade	205.11	2	102.56	.14	.87
Treat. x Grade	2860.13	2	1430.07	1.96	.14
Ability	21994.4	2	10997.2	15.11	.00*
Grade x Ability	3039.21	4	759.80	1.04	.39
Treat. x Ability	1915.17	2	957.58	1.32	.27
Treat. x Grade x Ability	2112.62	4	528.15	.73	.58
Cov. 1	27737.1	1	27737.1	38.10	.00*
Error	14340.2	197	727.93		

* $p < .05$

The results showed that (1) the experimental group achieved a significantly higher mean score (76.40) than the control group (23.13) on post Subtest 4, (2) the three ability levels differed significantly in their performance on post Subtest 4, and (3) there was no significant difference in the performance of the three grade levels on post Subtest 4.

When multiple pairwise comparisons were carried out on the ability factor, it was found that (1) the high ability group achieved a significantly higher mean score (62.9) than the mid ability group (49.7), and the low ability group (36.6) on post Subtest 4, (2) the mid ability group differed significantly from the high ability and the low ability groups, and (3) the low ability group achieved a significantly lower mean score than the mid and the high ability groups on post Subtest 4.

Table XIV also showed that there were no significant interactions among the major factors.

A significant difference was found among the groups in the concomitant variable, namely the Written Expressional (Subtest 4) pretest. The source of variance represented by the covariate was eliminated by the adjustment of post Written Expressional Subtest scores for differences in pretest performance.

Subtest 5. This subtest required the students to construct a single well-organized sentence. Each of the

seven items on this subtest required the students to write a sentence using details, comparison, and description to sharpen the image or the picture of a noun head word provided. This subtest was designed to test how effectively students were able to use their language resources. Table XV presents the results of the analysis of Subtest 5.

TABLE XV

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE WET: SUBTEST 5

Source	SS	df	MS	F	P
Treatment	507628.0	1	507628.0	288.56	.00*
Grade	8297.30	2	4148.60	2.36	.10
Treat. x Grade	1994.76	2	997.38	.57	.57
Ability	23092.1	2	11546.0	6.56	.001*
Grade x Ability	7932.16	4	1983.04	1.13	.34
Treat. x Ability	5317.87	2	2658.93	1.51	.22
Treat. x Grade x Ability	7672.84	4	1918.21	1.09	.36
Cov. 1	794.19	1	794.19	.45	.50
Error	346557.0	197	1759.17		

* $p < .05$

The results indicated that (1) the experimental group achieved a significantly higher mean score (116.01) than the control group (19.05) on post Subtest 5, (2) the ability groups differed significantly in their performance on the post Subtest 5, and (3) there was no significant difference in the performance of the three grade levels.

When multiple pairwise comparisons were carried out on the ability factor, it was found that on post Subtest 5 (1) the high ability group achieved a significantly higher mean score (80.6) than the low ability group (52.2), (2) there was no significant difference between the high ability and the mid ability groups, and (3) there was no significant difference between the low ability and the mid ability groups.

Table XV also showed that there were no significant interactions among the major factors.

No significant difference was found among the groups on the concomitant variable, namely the Written Expressional (Subtest 5) pretest.

The total score on the post WET and each of the five subtests scores produced significant F values for the treatment effect. The null hypothesis was therefore rejected. The total score and each of the subtest scores on the WET differentiated the performance of students in the experimental group and in the control group.

HYPOTHESIS 1b

> Students in the experimental group in grades seven, eight, and nine will not achieve significantly higher mean scores on the post Written Composition Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

Tables XVI and XVII present by treatment, by grade and by ability, the means and standard deviations of the scores

TABLE XVI

MEANS AND STANDARD DEVIATIONS BY GRADE, AND BY ABILITY, FOR THE EXPERIMENTAL GROUP ON THE WRITTEN COMPOSITION TEST

Grade	N	Ability		Pre Wr. Comp. Test				Post Wr. Comp. Test			
				Desc.	Narr.	Exp.	Total	Desc.	Narr.	Exp.	Total
7	6	H	$\bar{X}$	4.50	4.17	4.50	13.00	8.67	9.83	8.33	26.83
			SD	.96	.69	.96	2.45	.94	2.34	1.49	4.06
	6	Mid	$\bar{X}$	4.16	4.17	3.33	11.67	7.17	7.33	7.33	21.83
			SD	1.07	1.07	.47	1.60	1.77	1.79	1.79	4.95
	6	Low	$\bar{X}$	3.66	3.67	3.33	10.67	6.00	7.67	6.33	20.00
			SD	.94	1.11	.47	1.37	1.73	1.79	1.97	5.00
Total	18		$\bar{X}$	4.11	4.00	3.72	11.78	7.28	8.28	7.33	22.89
			SD	1.04	1.00	.87	2.09	1.88	2.28	1.94	5.51
8	6	H	$\bar{X}$	5.00	4.00	4.00	13.00	9.67	9.67	9.00	28.33
			SD	1.15	1.00	1.41	2.58	.74	1.97	1.41	3.59
	6	Mid	$\bar{X}$	5.00	4.00	3.50	12.50	9.00	8.67	7.67	25.33
			SD	1.00	1.00	.76	2.22	1.00	1.24	1.49	3.14
	6	Low	$\bar{X}$	3.66	4.33	3.00	11.00	8.50	9.17	8.00	25.67
			SD	.94	1.11	0.0	1.53	1.80	2.41	2.89	6.26
Total	18		$\bar{X}$	4.56	4.11	3.50	12.17	9.05	9.17	8.22	26.44
			SD	1.21	1.05	1.01	2.32	1.35	1.98	2.12	4.74
9	6	H	$\bar{X}$	5.67	4.67	4.33	14.67	9.50	10.00	8.50	28.00
			SD	.47	1.49	.47	1.89	2.06	2.00	1.80	4.86
	6	Mid	$\bar{X}$	5.50	4.17	3.50	13.17	8.67	9.50	9.33	27.50
			SD	1.50	1.46	.76	3.13	1.49	1.80	1.70	4.50
	6	Low	$\bar{X}$	4.50	4.67	3.50	12.67	7.83	8.67	7.83	24.33
			SD	1.26	1.25	.76	2.49	2.26	1.10	1.34	4.19
Total	18		$\bar{X}$	5.22	4.50	3.78	13.50	8.67	9.39	8.56	26.61
			SD	1.27	1.42	.79	2.69	2.08	1.77	1.74	4.81

TABLE XVII

MEANS AND STANDARD DEVIATIONS BY GRADE, AND BY ABILITY, FOR THE CONTROL GROUP ON THE WRITTEN COMPOSITION TEST

Grade	N	Ability		Pre Wr. Comp. Test				Post Wr. Comp. Test			
				Desc.	Narr.	Exp.	Total	Desc.	Narr.	Exp.	Total
7	6	H	$\bar{X}$	4.50	5.00	4.00	13.50	5.17	5.33	5.33	15.83
			SD	1.26	.58	1.00	2.29	1.06	1.11	1.11	2.48
	6	Mid	$\bar{X}$	4.17	4.67	3.50	12.33	4.67	5.17	4.00	13.83
			SD	1.21	1.24	.76	1.60	.75	.69	.82	1.21
	6	Low	$\bar{X}$	3.83	3.67	3.33	10.83	4.17	4.50	3.67	12.33
			SD	.69	.75	.47	1.21	.69	.50	.94	1.70
Total	18		$\bar{X}$	4.17	4.44	3.61	12.22	4.67	5.00	4.33	14.00
			SD	1.11	1.07	.83	2.07	.94	.88	1.20	2.36
8	6	H	$\bar{X}$	5.83	4.67	4.33	14.83	6.50	5.17	5.17	16.83
			SD	1.46	1.60	.75	3.44	1.50	1.67	1.57	3.93
	6	Mid	$\bar{X}$	4.67	4.50	3.83	13.00	6.00	5.50	5.00	16.50
			SD	.94	.76	1.06	1.41	1.00	1.25	1.00	2.43
	6	Low	$\bar{X}$	4.33	3.50	3.50	11.33	4.83	4.17	4.00	13.00
			SD	1.11	.76	1.12	2.13	1.07	1.07	1.15	2.52
Total	18		$\bar{X}$	4.94	4.22	3.89	13.06	5.78	4.94	4.72	15.44
			SD	1.35	1.23	1.05	2.86	1.40	1.47	1.37	3.50
9	6	H	$\bar{X}$	5.50	4.67	4.33	14.50	6.50	6.33	6.00	18.83
			SD	.50	.94	1.37	1.71	.76	.74	1.15	1.95
	6	Mid	$\bar{X}$	4.83	4.50	4.33	13.67	6.17	5.17	4.67	16.00
			SD	.90	1.26	.94	1.89	1.07	1.57	.75	1.91
	6	Low	$\bar{X}$	4.67	4.17	3.33	12.17	5.50	5.50	4.33	15.33
			SD	.94	1.07	.47	1.07	.50	.96	.47	1.11
Total	18		$\bar{X}$	5.00	4.44	4.00	13.44	6.06	5.67	5.00	16.72
			SD	.88	1.12	1.11	1.86	.91	1.25	1.11	2.28

obtained by students on the pre and post WCT (Descriptive, Narrative, Expository).

A three-way analysis of covariance was carried out to determine the existence of any significant differences among the main factors (treatment, grade, ability), and their interactions. Table XVIII presents the results of this analysis.

The results indicated that (1) the experimental group achieved a significantly higher mean score (16.8) on the post WCT than the control group (6.6), (2) the ability sub-groups differed significantly in their performance on the post WCT, and (3) there was no significant difference in the performance of the three grade levels on the post WCT.

TABLE XVIII

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE WCT

Source	SS	df	MS	F	P
Treatment	2789.34	1	2789.34	207.38	.00*
Grade	80.64	2	40.32	2.99	.056
Treat. x Grade	9.32	2	4.66	.35	.71
Ability	105.29	2	52.64	.39	.02*
Grade x Ability	18.46	4	4.62	.34	.85
Treat. x Ability	27.92	2	13.96	1.04	.36
Treat. x Grade x Ability	56.72	4	14.18	1.04	.38
Cov. 1	220.93	1	220.93	16.42	.00*
Error	1197.11	89	13.45		

* $p < .05$

When multiple pairwise comparisons were carried out on the ability factor using the adjusted test means, it was found that the high ability subgroup (mean = 13.1) did not differ significantly from the mid ability subgroup (mean = 11.1), and the mid ability subgroup did not differ significantly from the low ability subgroup (mean = 12.2). There was no significant difference between the high ability subgroup and the low ability subgroup in their performance on the WCT. This analysis indicated that although an overall significant difference existed among the three ability subgroups, this difference could not be localized more specifically to any pairwise combination of the three ability subgroups.

Table XVIII also indicated that there were no significant interactions among the main factors.

A significant difference was found among the groups in the concomitant variable, namely the total Written Composition pretest. The source of variance represented by the covariate was eliminated by the adjustment of post total WCT scores for differences in pretest performance.

The WCT score is a combination of three scores assigned to teach of three paragraphs written by all students in the sample. Three paragraphs were written in the pretest, and three paragraphs were written in the posttest. A three-way analysis of covariance (with the pretest scores used as the covariate) was carried out on each mode of writing to determine

any significant differences among the major factors (treatment, grade, ability), and their interactions. The results are presented under three headings.

Descriptive Paragraph

Table XIX presents the results of the analysis of covariance on the descriptive paragraph. The results showed that (1) the experimental group achieved a significantly higher adjusted mean test score (5.9) on the post descriptive paragraph than the control group (3.1), (2) the three grade levels differed significantly in their performance on the post descriptive paragraph, and (3) the ability groups differed significantly in their performance on the post descriptive paragraph.

TABLE XIX

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE WCT: DESCRIPTIVE PARAGRAPH

Source	SS	df	MS	F	P
Treatment	222.47	1	222.47	124.65	.00*
Grade	14.62	2	7.31	4.09	.01*
Treat. x Grade	3.30	2	1.65	.93	.40
Ability	22.91	2	11.46	6.42	.00*
Grade x Ability	2.12	4	.53	.29	.88
Treat. x Ability	5.05	2	2.53	1.42	.25
Treat. x Grade x Ability	3.59	4	.89	.50	.73
Cov. 1	32.99	1	32.99	18.49	.00*
Error	158.84	89	1.78		

* $p < .05$

When multiple pairwise comparisons were carried out on the grade factor (using the adjusted test mean scores), it was found that (1) grade nine students achieved a significantly higher adjusted test mean score (5.0) on the post descriptive paragraph than the grade seven students (4.0), (2) there was no significant difference between the performance of grade nine students and grade eight students (4.5), and (3) there was no significant difference between the performance of grade eight students and grade nine students on the post descriptive paragraph.

When multiple pairwise comparisons were carried out on the ability factor (using the adjusted test mean scores), it was found that (1) the high ability subgroup achieved a significantly higher adjusted mean score (5.2) on the post descriptive paragraph than the mid ability subgroup (4.0), (2) the high ability subgroup achieved a significantly higher adjusted mean score on the post descriptive paragraph than the low ability subgroup (4.2), and (3) there was no significant difference between the mid ability subgroup and the low ability subgroup in their performance on the post descriptive paragraph.

Table XIX also indicated that there were no significant interactions among the major factors.

A significant difference was found among the groups in the concomitant variable, namely the Written Composition (Descriptive) pretest. The source of variance represented

by the covariate was eliminated by the adjustment of post Written Composition (Descriptive) test scores for differences in pretest performance.

Narrative Descriptive Paragraph

Table XX presents the results of the analysis of covariance on the narrative descriptive paragraph. The results indicated that (1) the experimental group achieved a significantly higher adjusted test mean score (7.4) on the post narrative descriptive paragraph than the control group (3.6), (2) the three grade levels differed significantly in their performance on the post narrative descriptive paragraph, and (3) there were no significant differences in the performance of the three ability groups in the post narrative descriptive paragraph.

TABLE XX

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE WCT NARRATIVE DESCRIPTIVE PARAGRAPH

Source	SS	df	MS	F	P
Treatment	387.81	1	387.81	142.95	.00*
Grade	16.97	2	8.48	3.13	.04*
Treat. x Grade	5.11	2	2.56	.94	.39
Ability	11.43	2	5.72	2.11	.13
Grade x Ability	2.99	4	.75	.28	.89
Treat. x Ability	31.83	2	15.91	.59	.55
Treat. x Grade x Ability	11.23	4	2.81	1.04	.39
Cov. 1	1.69	1	16.93	6.24	.01*
Error	241.45	89	2.71		

* $p < .05$

When multiple pairwise comparisons were carried out on the grade factor (using the adjusted test mean scores), it was found that (1) there was no significant difference between the performance of grade nine students (5.9) and grade eight students (5.7) on the post narrative descriptive paragraph, (2) there was no significant difference between the performance of grade nine students and grade seven students (4.9) on the post narrative descriptive paragraph, and (3) there was no significant difference between the performance of grade eight students and grade seven students on the post narrative descriptive paragraph. These results indicated that although an overall significant difference existed among the three grades, this difference could not be localized more specifically to any pairwise combination of the three grades.

Table XX also revealed that there were no significant interactions among the main factors.

A significant difference was found among the groups in the concomitant variable, namely the Written Composition (Narrative Descriptive) pretest. The source of variance represented by the covariate was eliminated by the adjustment of post Written Composition (Narrative Descriptive) test scores for differences in pretest performance.

Expository Paragraph

Table XXI presents the results of the analysis of

covariance on the expository paragraph. The results indicated that (1) the experimental group achieved a significantly higher adjusted test mean score (7.5) on the post expository paragraph than the control group (4.1), (2) there was a significant difference in the performance of the three grade levels on the post expository paragraph, and (3) there were no significant differences in the performance of the three ability groups on the post expository paragraph.

When multiple pairwise comparisons were carried out on the grade factor (using the adjusted test mean scores), it was found that grade nine students achieved a significantly higher adjusted test mean score (6.4) on the post expository paragraph than the grade seven students (5.2), (2) the grade eight students (5.8) did not differ significantly from the grade seven students in their performance on the post expository paragraph, and (3) the grade nine students did not differ significantly from the grade eight students in their performance on the post expository paragraph.

Table XXI also indicated that there were no significant interactions among the major factors.

No significant difference was found among the groups on the concomitant variable, namely the Written Composition (Expository) pretest.

The total score on the post WCT, and the post scores on each of the three modes of writing produced significant F values for the treatment effect. The null hypothesis was

therefore rejected. The post WCT score, and the post scores on each of the three modes of writing differentiated the performance of students in the experimental group and students in the control group.

TABLE XXI

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE WCT: EXPOSITORY PARAGRAPH

Source	SS	df	MS	F	P
Treatment	304.87	1	304.87	115.20	.00*
Grade	22.72	2	11.36	4.29	.02*
Treat. x Grade	1.20	2	.60	.23	.80
Ability	15.59	2	7.79	2.95	.06
Grade x Ability	3.50	4	.87	.33	.86
Treat. x Ability	2.06	2	1.03	.39	.68
Treat. x Grade x Ability	10.59	4	2.65	1.00	.41
Cov. 1	1.68	1	1.68	.64	.43
Error	235.52	89	2.65		

* $p < .05$

HYPOTHESIS 2a

> Students in the experimental group in grades seven, eight and nine will not use a significantly higher frequency of free modifiers in the post Written Composition Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

Tables XXII and XXIII present by treatment, by grade, and by ability, the means and standard deviations for the number of free modifiers used by students on the pre and post WCT.

TABLE XXII

MEANS AND STANDARD DEVIATIONS BY GRADE, AND BY ABILITY, FOR THE FREQUENCY COUNT ON THE TOTAL NUMBER OF FREE MODIFIERS USED BY THE EXPERIMENTAL GROUP ON THE WRITTEN COMPOSITION TEST

Gr.	N	Ability		Pre Wr. Comp. Test						Post Wr. Comp. Test					
				NP	AP	PP	VP	Abs. P.	Total Free Mod.	NP	AP	PP	VP	Abs.P.	Total Free Mod.
7	12	H	$\bar{X}$	.25	.00	.00	.17	.00	.42	1.08	3.16	2.92	11.83	4.58	23.58
			SD	.43	.00	.00	.55	.00	.86	1.50	1.82	1.89	3.95	3.28	6.89
	12	Mid	$\bar{X}$	.08	.00	.00	.00	.00	.08	1.58	4.50	3.00	10.50	3.17	22.75
			SD	.28	.00	.00	.00	.00	.28	1.61	3.28	2.77	6.96	2.64	10.30
	12	Low	$\bar{X}$	.08	.08	.00	.08	.08	.33	1.67	4.42	2.25	11.58	2.00	21.92
			SD	.28	.28	.00	.28	.28	.62	1.65	5.04	1.74	5.00	1.91	9.99
Total	36		$\bar{X}$	.14	.03	.00	.08	.03	.28	1.44	4.03	2.72	11.31	3.25	22.75
			SD	.35	.16	.00	.36	.16	.65	1.61	3.68	2.21	5.48	2.88	9.21
8	12	H	$\bar{X}$	.08	.00	.00	.00	.00	.08	3.75	5.33	5.33	14.58	6.42	30.42
			SD	.28	.00	.00	.00	.00	.28	2.89	3.75	7.86	8.99	4.11	9.13
	12	Mid	$\bar{X}$	.08	.00	.00	.25	.00	.33	1.33	2.58	3.33	11.08	6.50	24.83
			SD	.28	.00	.00	.60	.00	.62	1.60	3.07	2.21	4.57	3.38	7.08
	12	Low	$\bar{X}$	.08	.00	.00	.42	.00	.50	1.17	4.33	3.25	13.08	4.67	26.50
			SD	.28	.00	.00	.95	.00	1.19	1.14	4.09	2.17	6.85	4.53	11.41
Total	36		$\bar{X}$	.08	.00	.00	.22	.00	.31	2.08	4.08	3.97	12.92	5.86	27.25
			SD	.28	.00	.00	.67	.00	.81	2.34	3.83	4.97	7.18	4.12	9.66
9	12	H	$\bar{X}$	.25	.00	.25	1.00	.00	1.50	3.67	9.33	3.83	17.42	4.42	38.67
			SD	.43	.00	.43	1.35	.00	2.02	2.21	5.71	1.95	7.08	2.96	9.89
	12	Mid	$\bar{X}$	.17	.00	.00	.42	.08	.67	4.33	5.67	2.17	18.50	5.00	35.67
			SD	.37	.00	.00	.76	.28	1.03	4.29	4.21	2.11	7.39	2.89	14.19
	12	Low	$\bar{X}$	.08	.00	.00	.50	.00	.58	2.17	5.33	2.92	10.50	4.92	25.83
			SD	.28	.00	.00	1.12	.00	1.11	1.99	8.95	1.89	6.24	2.69	13.20
Total	36		$\bar{X}$	.17	.00	.08	.64	.03	.92	3.39	6.78	2.97	15.47	4.78	33.39
			SD	.37	.00	.28	1.13	.16	1.52	3.15	6.84	2.10	7.77	2.86	13.70

TABLE XXIII

MEANS AND STANDARD DEVIATIONS BY GRADE, AND BY ABILITY, FOR THE FREQUENCY COUNT ON THE TOTAL NUMBER OF FREE MODIFIERS USED BY THE CONTROL GROUP ON THE WRITTEN COMPOSITION TEST

Gr.	N	Ability		Pre Wr. Comp. Test					Total Free Mod.	Post Wr. Comp. Test					Total Free Mod.
				NP	AP	PP	VP	Abs. P.		NP	AP	PP	VP	Abs. P.	
7	12	H	$\bar{X}$	.00	.00	.00	.25	.00	.25	.00	.00	.00	.08	.00	.08
			SD	.00	.00	.00	.60	.00	.60	.00	.00	.00	.28	.00	.28
	12	Mid	$\bar{X}$	.08	.00	.00	.00	.00	.08	.08	.00	.00	.08	.00	.08
			SD	.28	.00	.00	.00	.00	.28	.28	.00	.00	.28	.00	.28
	12	Low	$\bar{X}$	.00	.08	.08	.08	.00	.25	.00	.00	.00	.08	.00	.00
			SD	.00	.28	.28	.28	.00	.60	.00	.00	.00	.28	.00	.00
Total	36		$\bar{X}$	.03	.03	.03	.11	.00	.19	.03	.00	.00	.08	.00	.06
			SD	.16	.16	.16	.39	.00	.52	.16	.00	.00	.28	.00	.23
8	12	H	$\bar{X}$	.00	.17	.00	.50	.00	.67	.00	.00	.00	.25	.00	.25
			SD	.00	.37	.00	1.38	.00	1.65	.00	.00	.00	.43	.00	.43
	12	Mid	$\bar{X}$	.00	.00	.00	.17	.00	.17	.00	.00	.00	.33	.00	.33
			SD	.00	.00	.00	.55	.00	.55	.00	.00	.00	.85	.00	.85
	12	Low	$\bar{X}$	.00	.00	.08	.00	.00	.08	.00	.00	.00	.25	.00	.25
			SD	.00	.00	.28	.00	.00	.28	.00	.00	.00	.83	.00	.83
Total	36		$\bar{X}$	.00	.06	.03	.22	.00	.31	.00	.00	.00	.28	.00	.28
			SD	.00	.23	.16	.88	.00	1.05	.00	.00	.00	.73	.00	.73
9	12	H	$\bar{X}$	.25	.08	.17	.25	.08	.83	.08	.00	.33	.67	.25	1.33
			SD	.60	.28	.55	.43	.28	.99	.28	.00	.62	1.03	.43	1.65
	12	Mid	$\bar{X}$	.25	.00	.00	.17	.00	.42	.17	.00	.00	.08	.25	.50
			SD	.43	.00	.00	.55	.00	.64	.55	.00	.00	.28	.43	.76
	12	Low	$\bar{X}$	.17	.00	.08	.42	.00	.67	.00	.08	.08	.33	.08	.58
			SD	.37	.00	.28	.86	.00	.94	.00	.28	.28	.62	.28	.76
			$\bar{X}$	.22	.03	.08	.28	.03	.64	.08	.03	.14	.36	.19	.81
			SD	.48	.16	.36	.65	.16	.89	.36	.16	.42	.75	.40	1.20

A three-way analysis of covariance was carried out to determine the existence of any significant differences among the major factors (treatment, grade, ability), and their interactions. Table XXIV presents the results of this analysis.

TABLE XXIV

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE TOTAL NUMBER OF FREE MODIFIERS USED IN THE WCT

Source	SS	df	MS	F	P
Treatment	40225.2	1	40225.2	666.30	.00*
Grade	339.61	2	169.81	2.81	.06
Treat. x Grade	312.39	2	156.20	2.59	.08
Ability	995.05	2	497.52	8.24	.00*
Grade x Ability	307.58	4	76.89	1.27	.28
Treat. x Ability	86.31	2	431.55	7.15	.00*
Treat. x Grade x Ability	282.29	4	70.57	1.17	.33
Cov. 1	57.66	1	57.66	.95	.33
Error	11893.2	197	60.37		

* $p < .05$

The results indicated that (1) the experimental group used a significantly higher frequency of free modifiers (adjusted test mean = 27.4) on the post WCT than the control Group (adjusted test mean = .2), (2) the ability groups differed significantly in their use of free modifiers on the post WCT, and (3) there were no significant differences among the three grade levels in their use of free modifiers on the

post WCT.

When multiple pairwise comparisons were carried out on the ability factor (using the adjusted test mean scores) it was found that (1) the high ability group used a significantly higher mean number of free modifiers (16.4) on the post WCT than the low ability group (11.0), (2) there was no significant difference between the high ability group and the mid ability group (14.0) in the mean number of free modifiers used on the post WCT, and (3) there was no significant difference between the mid ability group and the low ability group in the mean number of free modifiers used on the post WCT.

Table XXIV also showed that the first order interaction between treatment and ability was found to be significant. This interaction, presented graphically in Figure III, may be explained as follows: In the control group, the high ability students used a higher mean number of free modifiers on the post WCT than the mid ability students and the mid ability students used a higher mean number of free modifiers than the low ability students. The low ability students used a significantly lower number of free modifiers than the mid and higher ability students. In the experimental group, the high, mid, and low ability students not only increased their use of free modifiers on the post WCT, but the low and mid ability students used approximately the same mean number of free modifiers as was used by the high ability students.

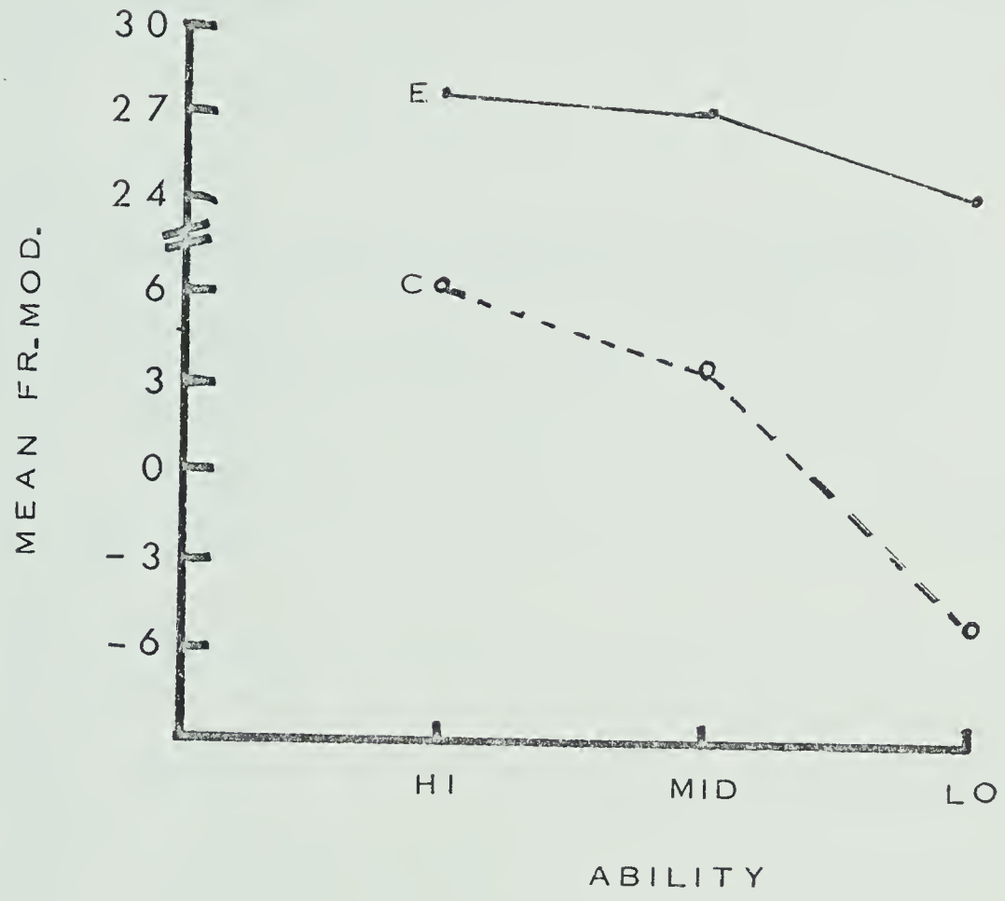

FIGURE III

INTERACTION BETWEEN TREATMENT AND ABILITY FOR FREQUENCY COUNT ON TOTAL FREE MODIFIERS (POST WET)

No significant difference was found among the groups on the concomitant variable, namely the Written Composition (Frequency Count: Total Free Modifiers) pretest.

The total number of free modifiers used in the post WCT produced significant F values for the treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 2b

> Students in the experimental group in grades seven, eight, and nine will not use a higher frequency of free modifiers in the post Written Expressional Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

Tables XXV and XXVI present by treatment, by grade, and by ability, the means and standard deviations for the frequency of free modifiers used by students on the pre and post WET.

A three-way analysis of covariance was carried out to determine the existence of any significant differences among the main factors (treatment, grade, ability) and their interactions. Table XXVII presents the results of this analysis.

The results indicated that (1) the experimental group used a significantly higher frequency of free modifiers (adjusted mean = 35.8) on the post WET than was used by the control group (3.0), (2) the three grade levels differed significantly in the mean number of free modifiers used on the post WET, and (3) the ability levels differed significantly in the mean number of free modifiers used on the post WET.

TABLE XXV

MEANS AND STANDARD DEVIATIONS BY GRADE, AND BY ABILITY, FOR THE FREQUENCY COUNT ON THE TOTAL NUMBER OF FREE MODIFIERS USED BY THE EXPERIMENTAL GROUP ON THE WRITTEN EXPRESSIONAL TEST

Gr.	N	Ability	$\bar{X}$ SD	Free Modifiers in Pre WET					Total Free Mod.	Free Modifiers in Post WET					Total Free Mod.
				NP	AP	PP	VP	Abs. P.		NP	AP	PP	VP	Abs. P.	
7	12	H	$\bar{X}$	1.16	1.33	.00	2.00	.66	5.16	2.66	1.66	1.83	18.08	13.83	37.00
			SD	1.28	.75	.00	1.68	1.03	2.11	1.25	.62	.90	6.02	5.87	11.37
	12	Mid	$\bar{X}$	.92	1.25	.00	2.33	.50	5.00	3.42	1.33	1.33	15.58	10.08	31.08
			SD	1.11	.60	.00	2.01	.76	2.48	1.98	.75	1.55	9.38	7.84	16.70
	12	Low	$\bar{X}$	1.08	.42	.00	1.58	.33	3.42	2.50	1.33	.67	14.17	10.58	29.25
			SD	2.22	.64	.00	3.12	.85	5.79	1.55	.75	.94	7.95	6.86	13.24
Ttl.	36		$\bar{X}$	1.06	1.00	.00	1.97	.50	4.53	2.86	1.44	1.28	15.94	11.50	32.44
			SD	1.61	.78	.00	2.37	.90	3.92	1.67	.72	1.26	8.07	7.10	14.33
8	12	H	$\bar{X}$	4.00	.50	1.08	1.00	.75	7.33	5.08	1.50	2.17	21.75	13.42	43.50
			SD	2.48	.76	1.71	1.22	1.16	3.64	1.44	1.50	1.46	6.80	6.29	12.87
	12	Mid	$\bar{X}$	1.67	.33	.00	1.25	.50	3.75	5.58	.92	2.08	17.75	11.42	36.75
			SD	1.31	.47	.00	2.05	.96	2.65	1.50	1.38	1.04	6.48	4.61	9.83
	12	Low	$\bar{X}$	1.50	.00	.00	.92	.00	2.42	3.83	1.00	.92	18.75	9.08	33.58
			SD	1.44	.00	.00	1.75	.00	2.66	1.57	.91	.95	7.74	5.04	12.25
Ttl.	36		$\bar{X}$	2.39	.28	.36	1.06	4.10	4.50	4.83	1.14	1.72	19.42	11.31	37.94
			SD	2.15	.56	1.11	1.72	.92	3.66	1.67	1.32	1.30	7.23	5.65	12.43
9	12	H	$\bar{X}$	2.25	.58	.00	3.08	1.75	7.67	6.00	3.25	3.00	26.67	17.42	55.50
			SD	1.59	.64	.00	1.89	1.42	3.27	1.63	3.14	.91	8.02	3.75	9.61
	12	Mid	$\bar{X}$	2.50	.75	.00	3.08	.83	7.17	5.17	2.33	1.92	28.50	14.50	50.75
			SD	1.76	.92	.00	2.25	1.07	4.41	1.14	1.89	1.19	4.56	2.81	6.42
	12	Low	$\bar{X}$	1.92	.17	.08	1.42	1.08	4.67	5.92	.92	1.17	19.75	13.42	40.58
			SD	1.44	.37	.28	1.89	1.71	3.20	2.50	1.26	.80	8.31	7.87	11.71
Ttl.	36		$\bar{X}$	2.22	.50	.03	2.53	1.22	6.50	5.69	2.17	2.03	24.97	15.11	48.94
			SD	1.61	.73	.16	2.17	1.47	3.90	1.88	2.43	1.24	8.10	5.55	11.36

TABLE XXVI

MEANS AND STANDARD DEVIATIONS BY GRADE, AND BY ABILITY, FOR THE FREQUENCY COUNT ON THE TOTAL NUMBER OF FREE MODIFIERS USED BY THE CONTROL GROUP ON THE WRITTEN EXPRESSIONAL TEST

Gr.	N	Ability	$\bar{X}$ SD	Free Modifiers in Pre-Wet					Total Free Mod.	Free Modifiers in Post-Wet					Total Free Mod.
				NP	AP	PP	VP	Abs. P.		NP	AP	PP	VP	Abs. P.	
7	12	H	$\bar{X}$	1.75	.50	.00	2.25	.75	5.25	1.42	.58	.08	5.33	1.67	9.08
			SD	2.74	.76	.00	2.55	1.42	3.85	1.44	.76	.28	4.66	3.27	5.75
	12	Mid	$\bar{X}$	.58	.50	.00	2.08	.33	3.50	1.00	.50	.00	1.92	.08	3.50
			SD	1.11	.76	.00	2.78	.47	2.99	1.29	.76	.00	3.35	.28	3.75
	12	Low	$\bar{X}$	.25	.25	.00	1.83	.17	2.50	.58	.00	.00	3.08	.17	3.92
			SD	.43	.43	.00	2.34	.37	2.53	.86	.00	.00	4.31	.37	4.21
Ttl.	36		$\bar{X}$	.86	.42	.00	2.06	.42	3.75	1.00	.36	.03	3.44	.64	5.50
			SD	1.84	.68	.00	2.57	.92	3.37	1.27	.67	.16	4.38	2.04	5.30
8	12	H	$\bar{X}$	3.58	.50	.08	3.25	1.58	9.00	4.75	.50	.17	2.67	.67	8.75
			SD	2.78	.66	.28	2.35	1.55	4.62	1.83	.65	.37	2.72	1.43	3.70
	12	Mid	$\bar{X}$	2.75	.50	.08	.58	.33	4.25	3.92	.50	.17	2.00	.67	7.25
			SD	2.92	.65	.28	1.11	.62	3.09	2.66	.66	.37	2.16	.94	5.26
	12	Low	$\bar{X}$	2.83	.17	.00	1.92	.58	5.50	3.92	.17	.00	.92	.17	5.17
			SD	1.67	.37	.00	2.96	.95	3.10	1.93	.37	.00	1.32	.37	2.37
Ttl.	36		$\bar{X}$	3.06	.39	.06	1.92	.83	6.25	4.19	.39	.11	1.86	.50	7.06
			SD	2.55	.59	.23	2.52	1.23	4.19	2.21	.59	.31	2.26	1.04	4.22
9	12	H	$\bar{X}$	3.75	.42	.00	3.0	.58	7.75	4.67	.42	.25	3.33	1.42	9.50
			SD	2.05	.64	.00	3.21	1.38	4.55	2.69	.86	.43	2.92	1.85	4.62
	12	Mid	$\bar{X}$	2.00	.25	.00	2.17	.33	4.75	3.92	.33	.08	2.92	1.17	8.42
			SD	1.29	.43	.00	2.58	.62	2.86	1.93	.85	.28	1.66	.99	3.15
	12	Low	$\bar{X}$	3.17	.17	.00	1.58	.50	5.42	4.25	.25	.08	2.83	1.25	8.67
			SD	2.41	.37	.00	2.14	.65	3.01	2.05	.43	.28	2.30	2.13	3.12
Ttl.	36		$\bar{X}$	2.97	.28	.00	2.25	.47	5.97	4.27	.33	.14	3.03	1.28	8.86
			SD	2.10	.51	.00	2.74	.96	3.78	2.27	.75	.35	2.36	1.73	3.73

TABLE XXVII

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE TOTAL FREE MODIFICATION STRUCTURES USED IN THE POST WET

Source	SS	df	MS	F	P
Treatment	57905.3	1	57905.3	738.53	.00*
Grade	697.89	2	348.94	4.45	.01*
Treat. x Grade	497.75	2	248.88	3.17	.04*
Ability	2470.07	2	1235.03	15.75	.00*
Grade x Ability	182.02	4	45.51	.58	.68
Treat. x Ability	1606.79	2	803.39	10.25	.00*
Treat. x Grade x Ability	225.97	4	56.49	.72	.58
Cov. 1	1587.79	1	1587.79	20.25	.00*
Error	15445.9	197	78.41		

* $p < .05$

When multiple pairwise comparisons were carried out on the grade factor (using adjusted test mean scores), it was found that (1) there was a significant difference between grade nine (21.7) and grade seven (17.4) in the mean number of free modifiers used on the post WET, (2) there was no significant difference between grade nine and grade eight in the use of free modifiers on the post WET, and (3) there was no significant difference between grade eight and grade seven in the use of free modifiers on the post WET.

When multiple pairwise comparisons were carried out on the ability factor (using the adjusted test mean scores) it was found that (1) the high ability students used a

significantly higher frequency of free modifiers (23.0) on the post WET than the low ability students (14.7), (2) the mid ability students used a significantly higher mean number of free modifiers (20.5) than the low ability students, and (3) there was no significant difference between the high ability students and the mid ability students in the mean number of free modifiers used on the post WET.

Table XXVII also indicated a significant interaction between the treatment factor and the ability factor. This interaction, presented graphically in Figure IV, can be explained as follows: In the control group, the high ability students used approximately twice as many free modifiers (mean = 9.8) as the mid ability students (mean = 4.3), and the mid ability students used approximately four times as many free modifiers as the low ability students (1.0) on the WET. This pattern disappeared in the experimental high, mid, and low ability groups. The low ability experimental group not only increased its use of free modifiers but used approximately the same mean number of free modifiers (34.6) as the mid ability group (36.2) and the high ability group (36.2).

Table XXVII also showed that the interaction between treatment and grade was found to be significant. This interaction, graphically presented in Figure V, can be explained as follows: The mean number of free modifiers used by grades seven, eight, and nine in the control group showed

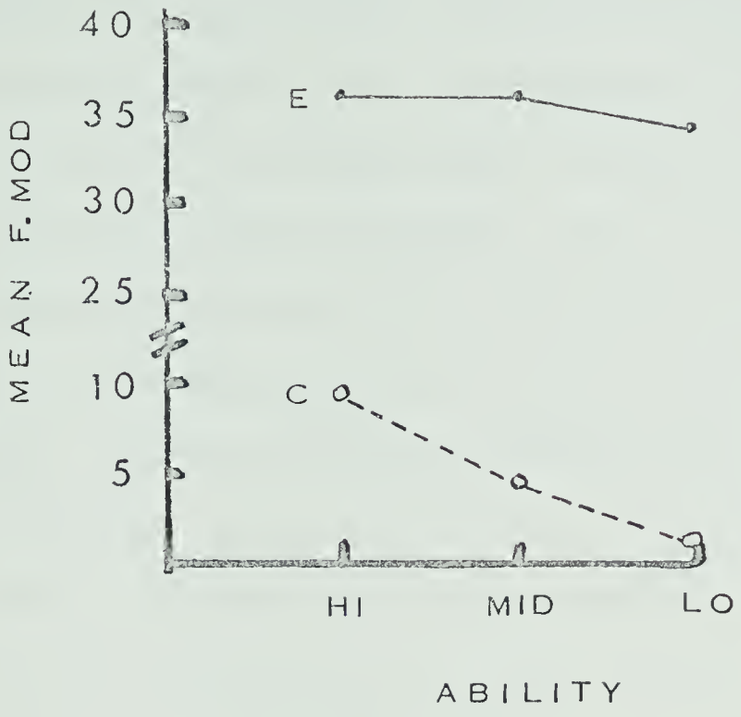

FIGURE IV

INTERACTION BETWEEN TREATMENT AND ABILITY FOR FREQUENCY COUNT ON TOTAL FREE MODIFIERS (POST WET)

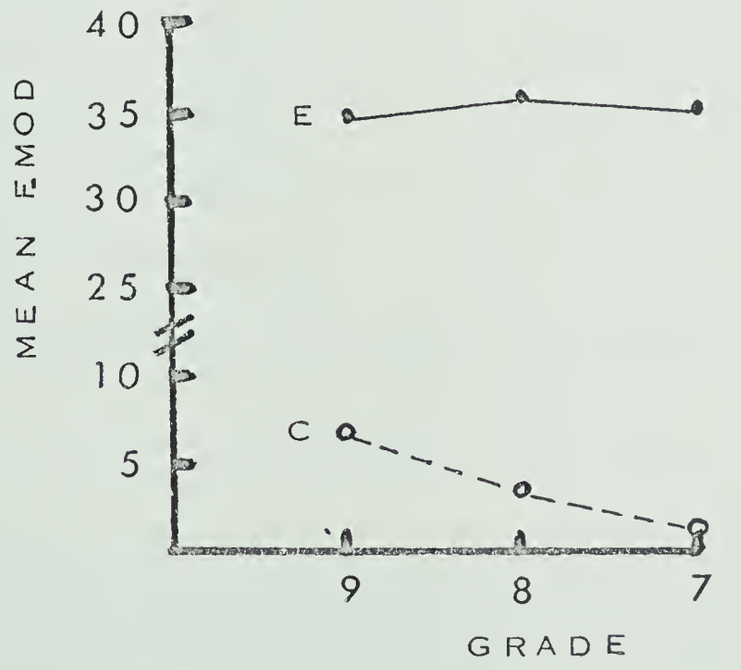

FIGURE V

INTERACTION BETWEEN TREATMENT AND GRADE FOR FREQUENCY COUNT ON TOTAL FREE MODIFIERS (POST WET)

a developmental pattern when adjusted for pretest variability. The grade nine students used approximately twice as many free modifiers (7.0) as the grade eight students (3.3) on the post WET, and the grade eight students used approximately three times as many free modifiers as the grade seven students (1.0) on the post WET. In the experimental group, however, this pattern disappeared. The experimental grades seven, eight, and nine not only increased their overall use of free modifiers, but the low ability students used approximately the same mean number of free modifiers as was used by the mid and high ability students on the post WET.

A significant difference was found among the groups in the concomitant variable, namely the Written Expressional (Frequency Count: Total Free Modifiers) pretest. The source of variance represented by the covariate was eliminated by the adjustment of post Written Expressional (Total Free Modification) test scores for differences in pretest performance.

The total number of free modifiers used on the post WET produced significant F values for the treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 3a

> Students in the experimental group in grades seven, eight, and nine will not use a significantly higher frequency of free noun phrases in the post Written Composition Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

Tables XXII and XXIII (pages 146 and 147) present by treatment, by grade and by ability, the means and standard deviations for the number of free noun phrases used by students on the pre and post WCT.

A three-way analysis of covariance (using the pre-test scores as the covariate) was carried out to determine the existence of any significant differences among the major factors (treatment, grade, ability), and their interactions. Table XXVIII presents the results of this analysis.

TABLE XXVIII

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE FREQUENCY COUNT ON THE NUMBER OF NOUN PHRASES USED ON THE WCT

Source	SS	df	MS	F	P
Treatment	276.58	1	276.58	95.66	.00*
Grade	13.46	2	6.73	2.33	.10
Treat. x Grade	11.79	2	5.89	2.04	.13
Ability	36.89	2	18.45	6.38	.00*
Grade x Ability	29.94	4	7.49	2.59	.03*
Treat. x Ability	32.48	2	16.24	5.62	.00*
Treat. x Grade x Ability	26.98	4	6.75	2.33	.06
Cov. 1	.008	1	.008	.003	.96
Error	.57	197	2.89		

* $p < .05$

The results indicated that (1) the experimental group used a significantly higher adjusted mean number of free noun phrases (2.3) on the post WCT than the control group (.1), (2) the ability groups differed significantly in the mean number of free noun phrases used on the Post WCT, and (3) there was no significant difference in the mean number of noun phrases used by the three grade levels on the post WCT.

When multiple pairwise comparisons were carried out on the ability factor (using the adjusted test mean scores), it was found that (1) the high ability group used a significantly higher number of free noun phrases (1.7) on the post WCT than the low ability group (.6), (2) there was no significant difference between the high ability group and the mid ability group (1.4) in their use of free noun phrases on the post WCT, and (3) there was no significant difference between the mid ability group and the low ability group on the post WCT.

Table XXVIII also showed significant interactions between (1) treatment and ability, and (2) grade and ability.

The interaction between treatment and ability, presented graphically in Figure VI, may be explained as follows: The mean number of free noun phrases used by students in the control group showed a developmental pattern when adjusted for pretest variability. More specifically, the high ability students used approximately twice as many noun

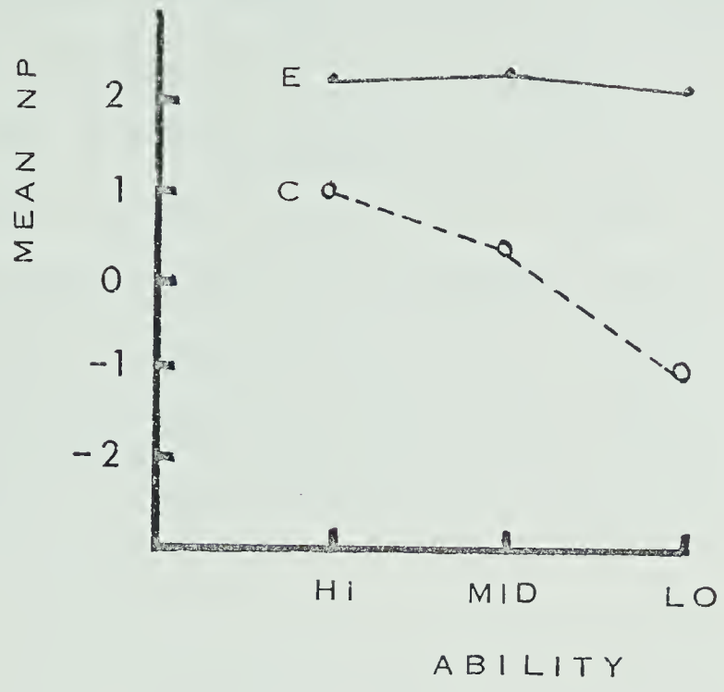

FIGURE VI

INTERACTION BETWEEN TREATMENT AND ABILITY FOR FREQUENCY COUNT ON FREE NOUN PHRASES (POST WCT)

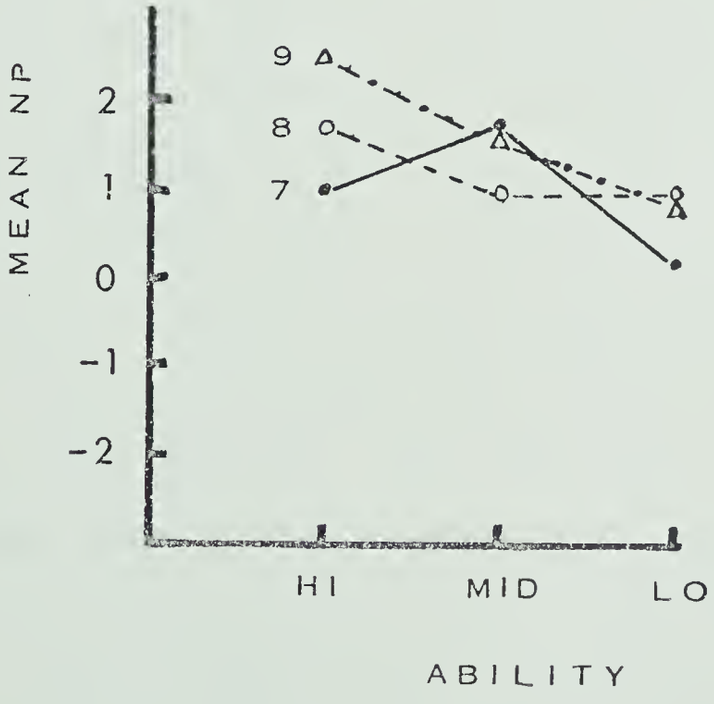

FIGURE VII

INTERACTION BETWEEN GRADE AND ABILITY FOR FREQUENCY COUNT ON FREE NOUN PHRASES (POST WCT)

phrases as the mid ability students on the post WCT, and the mid ability students used approximately four times the number of free noun phrases as the low ability students. In the experimental group, however, this pattern disappeared. The high, mid, and low ability students not only increased their overall use of free noun phrases on the post WCT, but the low ability students used approximately the same number of free noun phrases as the mid ability students and the high ability students.

The interaction between grade and ability, presented graphically in Figure VII, may be explained as follows: The high ability students in grade nine used a higher mean number of free noun phrases than the mid ability and the low ability students at the same grade level. The grade nine high ability students also used a higher mean number of noun phrases than the high ability students in grades eight and seven. The mid ability students in grade seven, however used a higher mean number of free noun phrases than the grade nine mid ability students and the grade eight mid ability students. The low ability students in grade seven used a lower mean number of free noun phrases than the low ability students in grades eight and nine. The grade eight low ability students used a higher mean number of free noun phrases in the post WCT than the low ability students in grade nine and grade seven. No clear pattern emerged from this interaction.

No significant difference was found among the groups on

the concomitant variable, namely the Written Composition (Frequency Count: Total Noun Phrases) pretest.

HYPOTHESIS 3b

> Students in the experimental group in grades seven, eight and nine will not use a significantly higher frequency of free noun phrases in the post WET than students in the control group at the same grade levels when pretest performance is used as a covariate.

Tables XXIV and XXV (pages 152 and 153) present by treatment, by grade, and by ability, the means and standard deviations for the number of free noun phrases used by students on the WET.

A three-way analysis of covariance (using the pretest scores as the covariate) was carried out to determine the existence of significant differences among the main factors (treatment, grade, ability), and their interactions. Table XXIX presents the results of this analysis.

The results indicated that (1) the experimental group used a significantly higher adjusted mean number of free noun phrases (4.2) on the post WET than the control group (2.8), (2) the ability groups differed significantly in their use of free noun phrases on the post WET, and (3) there was no significant difference in the mean number of free noun phrases used by the three grade levels on the post WET.

When multiple pairwise comparisons were carried out on the ability factor (using the adjusted test mean scores), it was found that (1) the high ability students used a

TABLE XXIX

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE FREE NOUN PHRASES USED ON THE WET

Source	SS	df	MS	F	P
Treatment	98.42	1	98.42	28.04	.00*
Grade	8.38	2	4.19	1.19	.31
Treat. x Grade	5.34	2	2.67	.76	.47
Ability	285.40	2	142.70	40.65	.00*
Grade x Ability	14.42	4	3.60	1.03	.39
Treat. x Ability	11.71	2	5.85	1.67	.19
Treat. x Grade x Ability	9.74	4	2.44	.69	.59
Cov. 1	12.84	1	12.84	3.66	.06
Error	691.58	197	3.51		

* $p < .05$

significantly higher mean number of free noun phrases (5.2) on the post WET than the mid ability students (2.9), (2) the high ability students used a significantly higher mean number of free noun phrases on the post WET than the low ability students (2.4), and (3) there was no significant difference in the mean number of free noun phrases used by the mid ability students and the low ability students.

Table XXIX also showed that there were no significant interactions among the major factors.

No significant differences was found among the groups on the concomitant variable, namely the Written Expressional (Frequency Count: Total Noun Phrases) pretest.

The total number of free noun phrases used on the post WET produced significant F values for the treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 4a

> Students in the experimental group in grades seven, eight and nine will not use a significantly higher frequency of free adjective phrases in the post Written Composition Test than students in the control group when pretest performance is used as a covariate.

Tables XXII and XXIII (pages 146 and 147) present by treatment, by grade, and by ability, the means and standard deviations for the number of free adjective phrases used by students on the pre and post WCT.

A three-way analysis of covariance (using the pretest scores as the covariate) was carried out to determine the existence of any significant differences among the major factors (treatment, grade, ability) and their interactions. Table XXX presents the results of this analysis.

The results indicated that (1) the experimental group used a significantly higher adjusted mean number of free adjective phrases (4.9) on the post WCT than the control group (.1), (2) the ability groups differed significantly in the mean number of free adjective phrases used on the post WCT, and (3) there was no significant difference in the mean number of free adjective phrases used by the three grade levels on the post WCT.

TABLE XXX

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE FREQUENCY COUNT ON THE NUMBER OF ADJECTIVE PHRASES USED ON THE WCT

Source	SS	df	MS	F	P
Treatment	1314.68	1	1314.68	102.75	.00*
Grade	26.89	2	13.44	1.05	.35
Treat. x Grade	27.96	2	13.98	1.09	.34
Ability	90.83	2	45.41	3.55	.03*
Grade x Ability	59.06	4	14.77	1.15	.33
Treat. x Ability	87.16	2	43.58	3.41	.03*
Treat. x Grade x Ability	62.49	4	15.62	1.22	.30
Cov. 1	7.70	1	0.08	.06	.94
Error	2520.68	197	12.80		

* $p < .05$

When multiple pairwise comparisons were carried out on the ability factor (using the adjusted test mean scores) it was found that (1) the high ability students used a significantly higher mean number of free adjective phrases (3.0) than the low ability students (1.6), (2) there was no significant difference in the mean number of free adjective phrases used by the high ability students and the mid ability students (2.9), and (3) there was no significant difference in the mean number of free adjective phrases used by the mid ability and the high ability students on the post WCT.

Table XXX also showed a significant interaction between the treatment factor and the ability factor. This

interaction, presented graphically in Figure VIII may be explained as follows: In the control group, the high ability and the mid ability students used approximately the same mean number of free adjective phrases on the WCT, but the low ability students in this group used a lower mean number. In the experimental group, the high, mid, and low ability students not only increased their overall use of free adjective phrases on the post WCT, but the low ability students used approximately the same number of free adjective phrases as the high and mid ability students.

No significant difference was found among the groups on the concomitant variable, namely the Written Composition (Frequency Count: Free Adjective Phrases) pretest.

The total number of free adjective phrases used on the post WCT produced significant F values for the treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 4b

> Students in the experimental group in grades seven, eight, and nine will not use a significantly higher frequency of free adjective phrases in the post Written Expressional Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

Tables XXIV and XXV (pages 152 and 153) present by treatment, by grade, and by ability, the means and standard deviations for the number of free adjective phrases used by students on the pre and post WET.

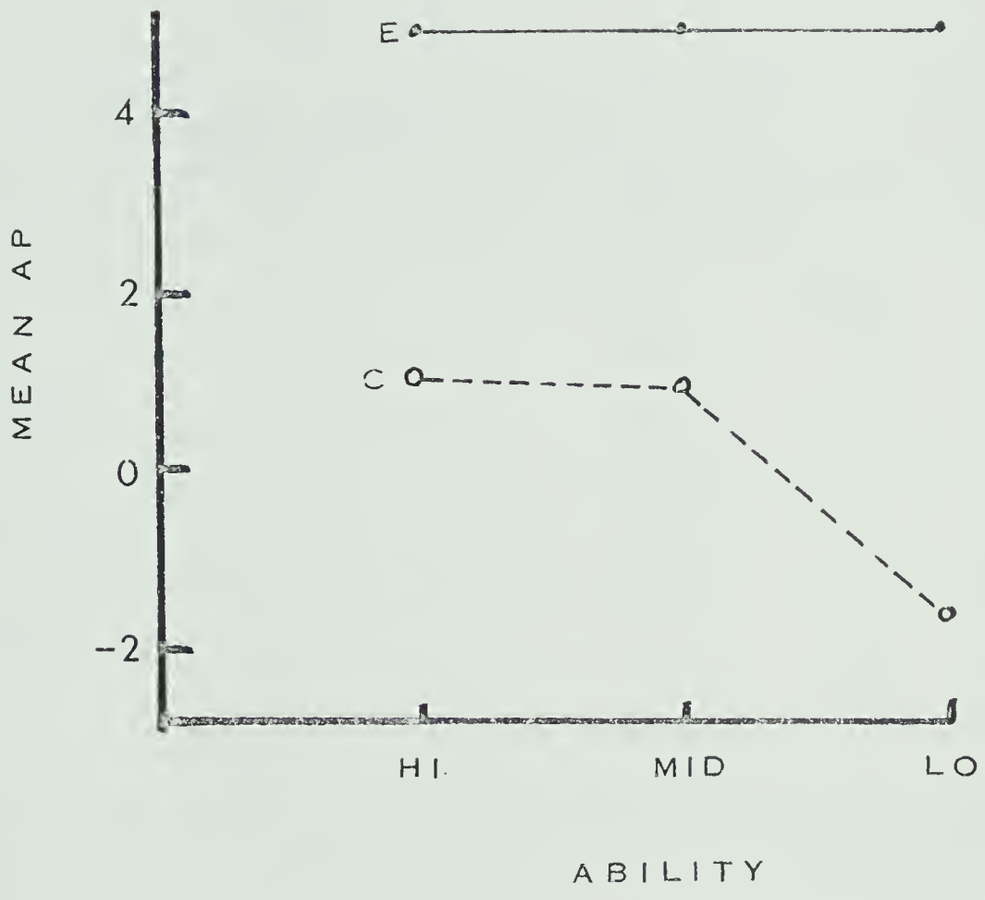

FIGURE VIII

INTERACTION BETWEEN TREATMENT AND ABILITY FOR FREQUENCY COUNT ON FREE ADJECTIVE PHRASES (POST WCT)

A three-way analysis of covariance (using the pretest scores as the covariate) was carried out to determine the existence of any significant differences among the major factors (treatment, grade, ability), and their interactions. Table XXXI presents the results of this analysis.

TABLE XXXI

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE FREE ADJECTIVE PHRASES USED ON THE WET

Source	SS	df	MS	F	P
Treatment	73.41	1	73.41	48.00	.00*
Grade	18.08	2	9.04	.16	.21
Treat. x Grade	4.38	2	2.19	1.43	.24
Ability	9.36	2	4.68	3.06	.05*
Grade x Ability	5.93	4	1.48	.97	.42
Treat. x Ability	10.58	2	5.29	3.46	.03*
Treat. x Grade x Ability	11.54	4	2.89	1.89	.11
Cov. 1	1.82	1	1.82	1.19	.28
Error	301.35	197	1.53		

* $p < .05$

The results indicated that (1) the experimental group used a significantly higher adjusted mean number of free adjective phrases (1.5) on the post WET than the control group (0.3), (2) the ability groups differed significantly in the mean number of free adjective phrases used on the post WET, and (3) there was no significant difference in the mean number of free adjective phrases used by the three grade

levels on the post WET.

When multiple pairwise comparisons were carried out on the ability factor (using the adjusted test mean scores), it was found that the mean number of free adjective phrases used by the high ability students (1.0) did not differ significantly from the mid ability students (1.1); the mean number for the mid ability students did not differ significantly from the low ability students (0.6); and the mean number for the high ability students did not differ significantly from the low ability students. This indicated that although an overall significant difference existed among the three ability groups, this difference could not be localized more specifically to any pairwise combination of the three grades.

Table XXXI also showed a significant interaction between the treatment factor and the ability factor. This interaction, presented graphically in Figure IX, may be explained as follows: In the control group, the mid ability students used a higher mean number of free adjective phrases on the post WET than the high ability and low ability students, and the high ability students used a higher mean number of free adjective phrases on the post WET than the low ability students. The high, mid, and low ability students in the experimental group not only increased their overall use of the free adjective phrases, but students in each ability group used the same mean number of free adjective phrases on the post WET.

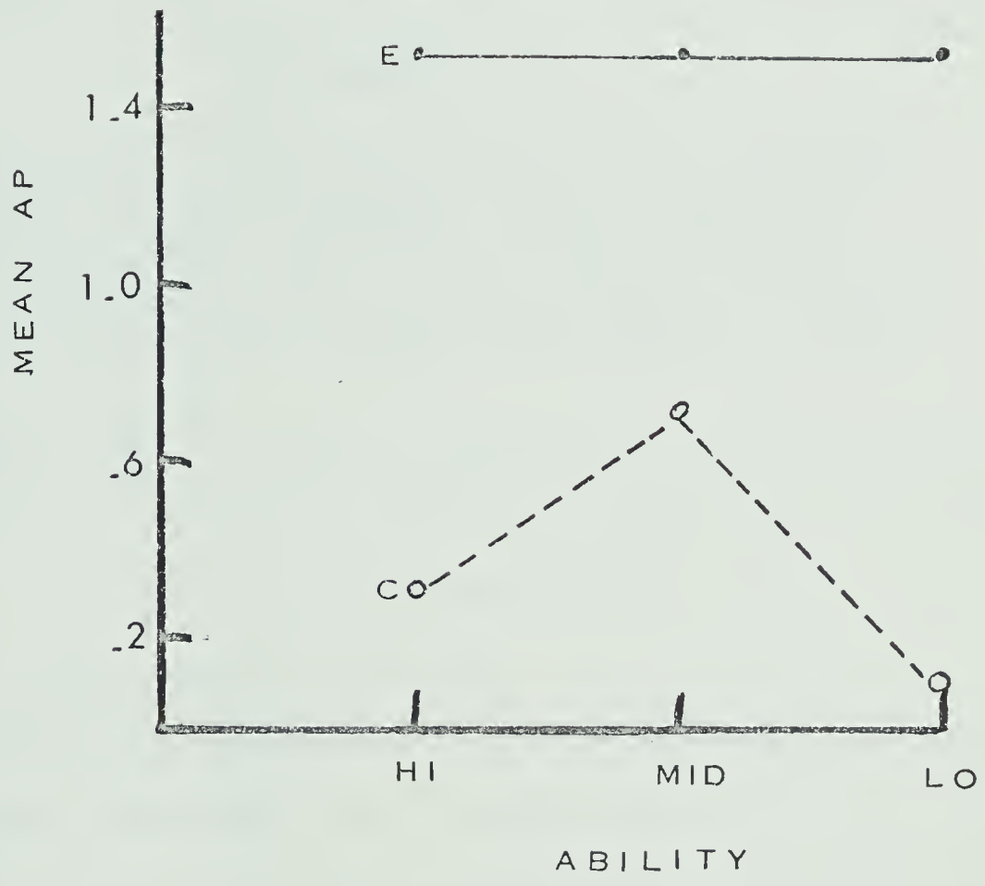

FIGURE IX

INTERACTION BETWEEN TREATMENT AND ABILITY FOR FREQUENCY COUNT ON FREE ADJECTIVE PHRASES (POST WET)

No significant difference was found among the groups on the concomitant variable, namely the Written Expressional (Frequency Count: Free Adjective Phrases) pretest.

The total number of free adjective phrases used on the post WET produced significant F values for the treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 5a

> Students in the experimental group in grades seven, eight, and nine will not use a significantly higher frequency of free absolute phrases on the post Written Composition Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

Tables XXII and XXIII (pages 146 and 147) present by treatment, by grade, and by ability, the means and standard deviations for the number of free absolute phrases used by students on the pre and post WCT.

A three-way analysis of covariance using the pretest scores as the covariate) was carried out to determine the existence of any significant differences among the major factors (treatment, grade, ability), and their interactions. Table XXXII presents the results of this analysis.

The results indicated that (1) the experimental group used a significantly higher adjusted mean number of free absolute phrases (4.7) on the post WCT than was used by the control group (.1), (2) the ability groups differed significantly in the mean number of free absolute phrases used on the post WCT, and (3) there was no significant difference in

the mean number of free absolute phrases used by the three grade levels on the post WCT.

When multiple pairwise comparisons (using the adjusted test mean scores) were carried out on the ability factor it was found that (1) the high ability students used a significantly higher mean number of free absolute phrases (3.1) on the post WCT than was used by the mid ability students (1.8), (2) there was no significant difference in the mean number of free absolute phrases used by the high ability students and the low ability students (2.3) on the post WCT, and (3) there was no significant difference in the mean number of free absolute phrases used by the mid ability students and the low ability students on the post WCT.

TABLE XXXII

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE FREQUENCY COUNT ON THE FREE ABSOLUTE PHRASE USED ON THE WCT

Source	SS	df	MS	F	P
Treatment	1125.41	1	1125.41	194.50	.00*
Grade	18.08	2	9.04	.16	.21
Treat. x Grade	14.49	2	7.25	1.25	.29
Ability	62.98	2	31.49	5.44	.00*
Grade x Ability	15.19	4	3.80	.66	.62
Treat. x Ability	60.62	2	30.31	5.24	.00*
Treat. x Grade x Ability	19.66	4	4.92	.85	.50
Cov. 1	.57	1	.57	.09	.75
Error	1139.85	197	5.79		

* $p < .05$

Table XXXII also showed a significant interaction between the treatment factor and the ability factor. This interaction, presented in Figure X, may be explained as follows: In the control group, the high ability students used a higher mean number of free absolute phrases on the post WCT than was used by the mid ability students and the low ability students. The mean number of free absolute phrases used by the mid ability students was lower than the mean number used by the low ability students. In the experimental group, the high, mid, and low ability students not only increased their overall use of free absolute phrases on the post WCT, but the low ability students used approximately the same mean number of free absolute phrases as the mid ability students and the low ability students on the post WCT.

No significant difference was found among the groups on the concomitant variable, namely the Written Composition (Frequency Count: Free Absolute Phrases) pretest.

The total number of free absolute phrases used on the post WCT produced significant F values for the treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 5b

> Students in the experimental group in grades seven, eight, and nine will not use a significantly higher frequency of free absolute phrases in the post Written Expressional Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

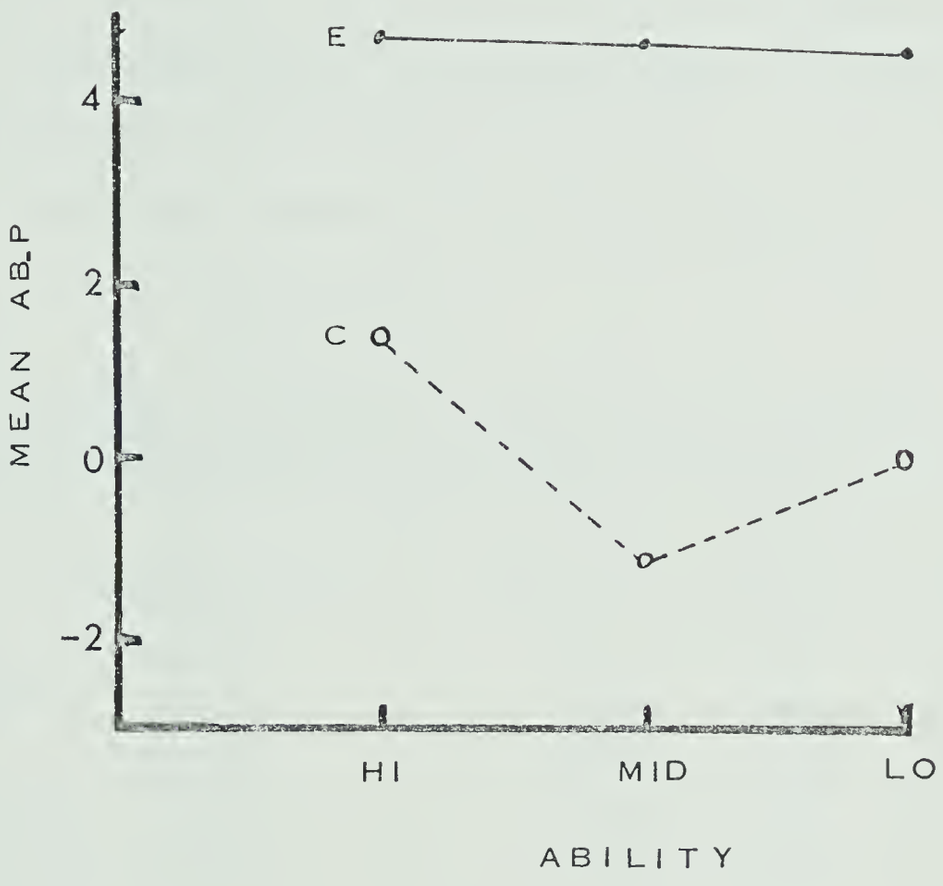

FIGURE X

INTERACTION BETWEEN TREATMENT AND ABILITY FOR FREQUENCY COUNT ON FREE ABSOLUTE PHRASES (POST WCT)

Tables XXIV and XXV (pages 152 and 153) present by treatment, by grade, and by ability, the means and standard deviations for the number of free absolute phrases used by students on the pre and post WET.

A three-way analysis of covariance (using the pretest scores as the covariate) was carried out to determine the existence of any significant differences among the major factors (treatment, grade, ability), and their interactions. Table XXXIII presents the results of this analysis.

TABLE XXXIII

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE FREE ABSOLUTE PHRASES USED ON THE WET

Source	SS	df	MS	F	P
Treatment	7473.11	1	7473.11	367.18	.00*
Grade	164.18	2	82.09	4.03	.01*
Treat. x Grade	95.35	2	47.68	2.34	.09
Ability	212.40	2	106.20	5.22	.00*
Grade x Ability	25.58	4	6.39	.31	.87
Treat. x Ability	85.02	2	42.51	2.09	.13
Treat. x Grade x Ability	9.73	4	2.43	.12	.98
Cov. 1	22.66	1	22.66	1.11	.29
Error	4009.54	197	20.35		

* $p < .05$

The results indicated that (1) the experimental group used a significantly higher mean number of free absolute phrases (12.6) on the post WET than was used by the control group (0.6), (2) there was a significant difference in the mean number of free absolute phrases used by the three grade levels on the post WET, and (3) there was a significant difference in the mean number of free absolute phrases used by the ability groups on the post WET.

When multiple pairwise comparisons (using the adjusted test mean scores) were carried out on the grade factor, it was found that (1) the grade nine students used a significantly higher mean number of free absolute phrases (7.3) than the grade seven students (5.2), (2) there was no significant difference in the mean number of free absolute phrases used by the grade nine students and the grade eight students (6.8) on the post WET, and (3) there was no significant difference in the mean number of free absolute phrases used by the grade eight students and by the grade seven students on the post WET.

When multiple pairwise comparisons (using the adjusted test mean scores) were carried out on the ability factor, it was found that (1) the high ability students used a significantly higher mean number of free absolute phrases (7.9) on the post WET than was used by the low ability students (7.1), (2) the high ability students used a significantly higher mean number of free absolute phrases on the post WET than was used by the mid ability students (7.3), and (3) there

was no significant difference in the mean number of free absolute phrases used by the mid ability students and the low ability students on the post WET.

No significant difference was found among the groups on the concomitant variable, namely the Written Expressional (Frequency Count: Free Absolute Phrases) pretest.

The total number of free absolute phrases used on the post WET produced significant F values for the treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 6a

> Students in the experimental group in grades seven, eight, and nine will not use a significantly higher frequency of free prepositional phrases in the post Written Composition Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

Tables XXII and XXIII (pages 146 and 147) present by treatment, by grade, and by ability, the means and standard deviations for the number of free prepositional phrases used by students on the pre and post WCT.

A three-way analysis of covariance (using the pretest scores as the covariate) was carried out to determine the existence of any significant differences among the major factors (treatment, grade, ability), and their interactions. Table XXXIV presents the results of this analysis.

The results indicated that (1) the experimental group used a significantly higher mean number of free prepositional

TABLE XXXIV

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE FREQUENCY COUNT ON THE FREE PREPOSITIONAL PHRASES USED ON THE WCT

Source	SS	df	MS	F	P
Treatment	541.14	1	541.14	90.85	.00*
Grade	21.34	2	10.67	1.79	.17
Treat. x Grade	15.47	2	7.73	1.30	.28
Ability	14.46	2	7.23	1.21	.30
Grade x Ability	10.75	4	2.69	.45	.77
Treat. x Ability	17.10	2	8.55	1.44	.24
Treat. x Grade x Ability	9187.68	4	2.30	.39	.82
Cov. 1	1.22	1	1.22	.20	.65
Error	1173.37	197	5.96		

* $p < .05$

phrases (3.1) on the post WCT than the control group (.1), (2) there was no significant difference in the mean number of free prepositional phrases used by the three grade levels on the post WCT, and (3) there was no significant difference in the mean number of free prepositional phrases used by the three ability groups on the post WCT.

Table XXXIV also showed that there were no significant interactions among the major factors.

No significant difference was found among the groups on the concomitant variable, namely the Written Composition (Frequency Count: Free Prepositional Phrases) pretest.

The total number of free prepositional phrases used on the post WCT produced significant F values for the

treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 6b

> Students in the experimental group in grades seven, eight, and nine will not use a significantly higher frequency of free prepositional phrases on the post WET than students in the control group at the same grade levels when pretest performance is used as a covariate.

Tables XXIV and XXV (pages 152 and 153) present by treatment, by grade, and by ability, the means and standard deviations for the number of free prepositional phrases used by students on the pre and post WET.

A three-way analysis of covariance (using the pretest scores as the covariate) was carried out to determine the existence of any significant differences among the major factors (treatment, grade, ability), and their interactions. Table XXXV presents the results of this analysis.

The results indicated that (1) the experimental group used a significantly higher adjusted mean number of free prepositional phrases (1.7) on the post WET than the control group (.1), (2) the three grade levels differed significantly in the mean number of free prepositional phrases used on the post WET, and (3) the ability groups differed significantly in the mean number of free prepositional phrases used on the post WET.

When multiple pairwise comparisons (using the adjusted test mean scores) were carried out on the grade factor, it

TABLE XXXV

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE FREQUENCY COUNT ON FREE PREPOSITIONAL PHRASES USED ON THE WET

Source	SS	df	MS	F	P
Treatment	134.84	1	134.84	188.32	.00*
Grade	22.34	2	11.17	15.60	.00*
Treat. x Grade	15.38	2	7.69	10.74	.00*
Ability	6.92	2	3.46	4.8	.01*
Grade x Ability	2.23	4	.56	.78	.54
Treat. x Ability	.38	2	1.88	2.63	.07
Treat. x Grade x Ability	1.02	4	.26	.36	.84
Cov. 1	.36	1	.36	.50	.48
Error	141.06	197	.72		

* $p < .05$

was found that (1) students in grade nine used a significantly higher adjusted mean number of free prepositional phrases (1.34) on the post WET than students in grade eight (.9), (2) students in grade nine used a significantly higher frequency of free prepositional phrases on the post WET than students in grade seven (.54), and (3) there was no significant difference in the mean number of free prepositional phrases used by students in grade eight and students in grade seven.

When multiple pairwise comparisons (using the adjusted test mean scores) were carried out on the ability factor, it was found that (1) the high ability students used a significantly higher mean number of free prepositional phrases

(1.4) on the post WET than the low ability students (.74), (2) there was no significant difference in the mean number of free prepositional phrases used by the high ability students and the mid ability students (.9) on the post WET, and (3) there was no significant difference in the mean number of free prepositional phrases used by the mid ability students and the low ability students on the post WET.

Table XXXV also indicated a significant interaction between the treatment factor and the grade factor. This interaction, presented in Figure XI, may be explained as follows: In the control group, students in grade eight and grade nine used approximately the same mean number of free prepositional phrases on the post WET. However, the mean number of free prepositional phrases used by the grade seven students in the control group decreased considerably. Grades seven, eight, and nine students in the experimental group not only increased their overall use of free prepositional phrases in the post WET but the difference in the mean number of free prepositional phrases used by the grade nine students and the grade seven students was not as great as that of the same grades in the control group.

No significant difference was found among the groups on the concomitant variable, namely the Written Expressional (Frequency Count: Free Prepositional Phrases) pretest.

The total number of free prepositional phrases used on the post WET produced significant F values for the treatment

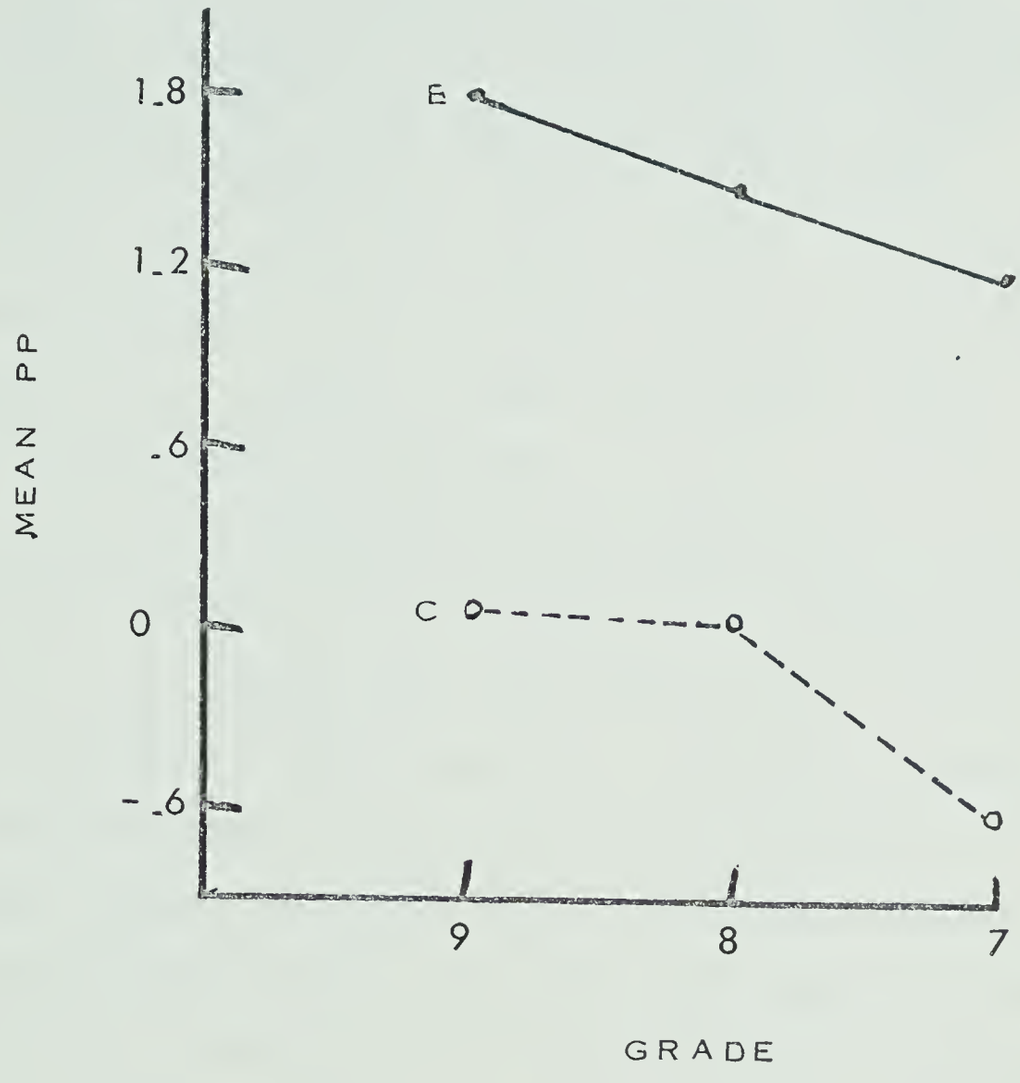

FIGURE XI

INTERACTION BETWEEN TREATMENT AND GRADE FOR FREQUENCY COUNT ON FREE PREPOSITIONAL PHRASES (POST WET)

effect. The null hypothesis was therefore rejected.

HYPOTHESIS 7a

> Students in the experimental group in grades seven, eight, and nine will not use a significantly higher frequency of free verb phrases in the post Written Composition Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

Tables XXII and XXIII (pages 146 and 147) present by treatment, by grade, and by ability, the means and standard deviations for the number of free verb phrases used by students on the pre and post WCT.

A three-way analysis of covariance (using the pretest scores as the covariate) was carried out to determine the existence of any significant differences among the major factors (treatment, grade, ability), and their interactions. Table XXXVI presents the results of this analysis.

The results indicated that (1) the experimental group used a significantly higher adjusted mean number of free verb phrases (13.0) on the post WCT than was used by the control group (.2), (2) there was no significant difference in the mean number of free verb phrases used by the three grade levels on the post WCT, and (3) there was no significant difference in the mean number of free verb phrases used by the ability groups on the post WCT.

Table XXXVI also revealed that there were no significant interactions among the major factors.

TABLE XXXVI

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE FREQUENCY COUNT ON THE FREE VERB PHRASES USED ON THE WCT

Source	SS	df	MS	F	P
Treatment	8957.09	1	8957.09	386.44	.00*
Grade	73.97	2	36.98	1.60	.21
Treat. x Grade	74.18	2	37.09	1.60	.20
Ability	137.38	2	68.70	2.96	.054
Grade x Ability	191.56	4	47.89	2.07	.09
Treat. x Ability	119.33	2	59.67	2.57	.08
Treat. x Grade x Ability	195.27	4	48.82	2.11	.08
Cov. 1	47.31	1	47.31	2.04	.15
Error	4566.14	197	23.18		

* $p < .05$

No significant difference was found among the groups on the concomitant variable, namely the Written Composition (Frequency Count: Free Verb Phrases) pretest.

The total number of free verb phrases used on the post WCT produced significant F values for the treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 7b

> Students in the experimental group in grades seven, eight, and nine will not use a significantly higher frequency of free verb phrases on the post WET than students in the control group at the same grade levels when pretest performance is used as a covariate.

Tables XXIV and XXV (pages 152 and 153) present by

treatment, by grade, and by ability, the means and standard deviations for the number of free verb phrases used by students on the pre and post WET.

A three-way analysis of covariance (using the pretest scores as the covariate) was used to determine the existence of any significant differences among the major factors (treatment, grade, ability), and their interactions. Table XXXVII presents the results of this analysis.

TABLE XXXVII

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE FREQUENCY COUNT ON FREE VERB PHRASES USED ON THE WET

Source	SS	df	MS	F	P
Treatment	16543.0	1	16543.0	540.48	.00*
Grade	185.14	2	92.57	3.02	.06
Treat. x Grade	106.03	2	53.01	1.73	.18
Ability	583.91	2	291.95	9.54	.00*
Grade x Ability	134.26	4	33.56	1.09	.36
Treat. x Ability	766.83	2	383.42	12.53	.00*
Treat. x Grade x Ability	213.67	4	53.42	1.75	.14
Cov. 1	829.74	1	829.74	27.11	.00*
Error	6029.80	197	30.61		

* $p < .05$

The results indicated that (1) the experimental group used a significantly higher adjusted mean number of free verb phrases (18.6) on the post WET than was used by the control group (1.0), (2) the ability groups differed significantly in the mean number of free verb phrases used on the post WET, and (3) there was no significant difference in the mean number of free verb phrases used by the three grade levels on the post WET.

When multiple pairwise comparisons (using the adjusted test mean scores) were carried out on the ability factor, it was found that (1) the high ability students used a significantly higher mean number of free verb phrases (11.6) on the post WET than was used by the low ability students (7.6), (2) the mid ability students used a significantly higher mean number of free verb phrases (10.2) on the post WET than was used by the low ability students, and (3) there was no significant difference in the mean number of free verb phrases used by the high ability students and the mid ability students on the post WET.

Table XXXVII also indicated a significant interaction between the treatment factor and the ability factor. This interaction, presented graphically in Figure XII may be explained as follows: In the control group, the high ability students used a higher mean number of free verb phrases on the post WET than the mid ability and the low ability students. The mid ability students used a lower mean number

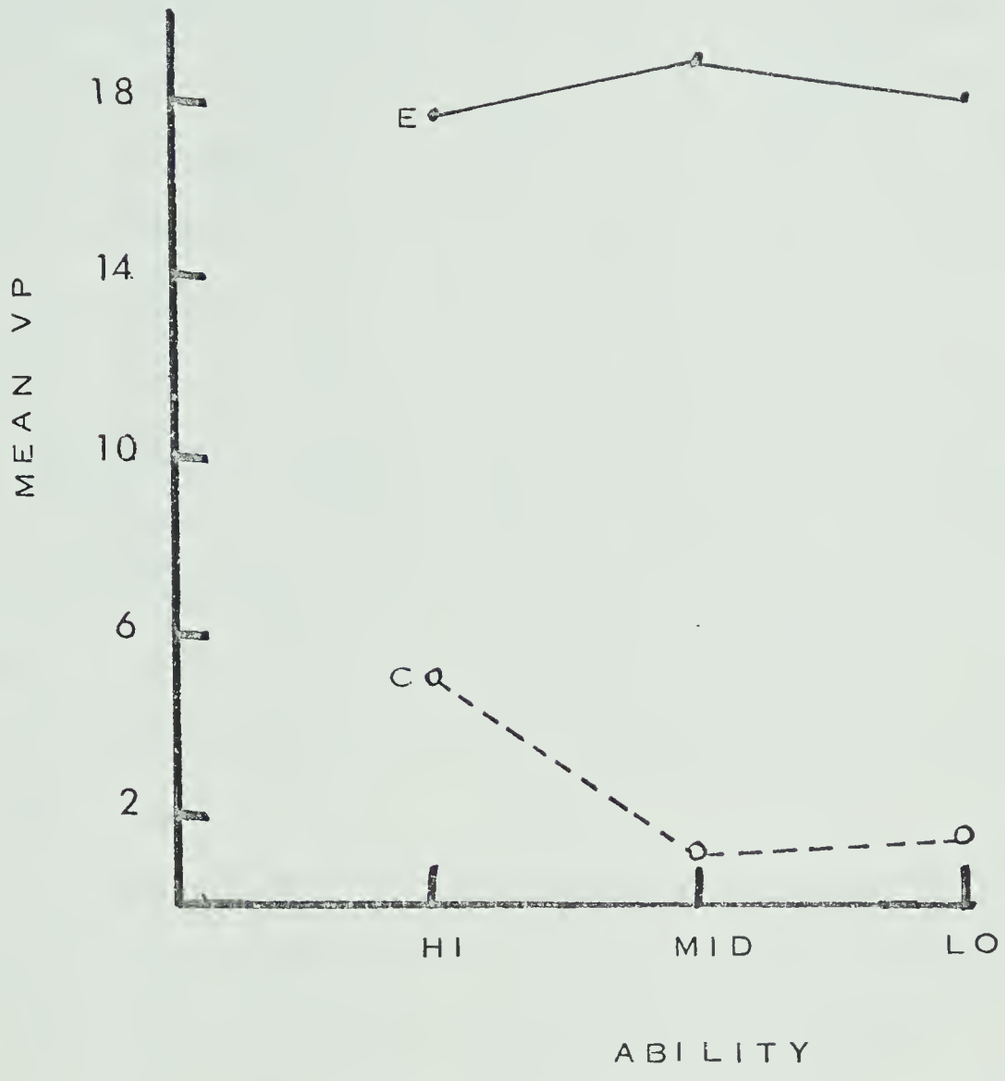

FIGURE XII

INTERACTION BETWEEN TREATMENT AND ABILITY FOR FREQUENCY COUNT ON FREE VERB PHRASES (POST WET)

of free verb phrases in the post WET than the low ability students. In the experimental group the high, mid, and low ability students not only increased their overall use of free verb phrases on the post WET, but the mean number of free verb phrases used by the mid ability students was higher than that used by the high ability students. The low ability students also used a slightly higher mean number of free verb phrases than the high ability students.

A significant difference was found among the groups in the concomitant variable, namely the Written Expressional (Frequency Count: Free Verb Phrases) pretest. The source of variance represented by the covariate was eliminated by the adjustment of post Written Expressional (Frequency Count: Free Verb Phrases) test scores for differences in pretest performance.

The total number of free verb phrases used on the post WET produced significant F values for the treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 8

> Students in the experimental group in grades seven, eight, and nine will not use a significantly higher frequency of long T-units on the post Written Composition Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

Table XXXVIII presents by treatment, by grade, and by ability, the means and standard deviations for the frequency

TABLE XXXVIII

MEANS AND STANDARD DEVIATIONS BY TREATMENT, BY GRADE, AND BY ABILITY, FOR THE TOTAL NUMBER OF WORDS USED ON THE WRITTEN COMPOSITION TEST (18 T-UNITS)

Gr.	N	Ability	$\bar{X}$ SD	Experimental Group		Control Group	
				Pre Wr. Comp. Test	Post Wr. Comp. Test	Pre Wr. Comp. Test	Post Wr. Comp. Test
	12	H	$\bar{X}$	201.42	258.92	162.42	169.25
			SD	27.42	26.75	18.96	25.14
7	12	Mid	$\bar{X}$	178.75	230.50	164.33	166.75
			SD	24.28	53.73	18.79	19.01
	12	Low	$\bar{X}$	182.92	241.42	140.92	161.58
			SD	30.07	43.08	29.31	24.89
Ttl.	36		$\bar{X}$	187.69	243.61	155.89	165.86
			SD	29.08	44.23	25.23	23.40
	12	H	$\bar{X}$	162.83	258.58	182.17	172.75
			SD	22.53	30.31	16.01	25.32
8	12	Mid	$\bar{X}$	167.50	238.17	163.92	182.33
			SD	10.67	8.79	16.73	16.23
	12	Low	$\bar{X}$	164.92	259.92	171.25	184.50
			SD	22.08	62.04	20.42	18.10
Ttl.	36		$\bar{X}$	165.08	252.22	172.44	179.86
			SD	20.21	44.06	19.34	20.90
	12	H	$\bar{X}$	179.75	328.33	216.58	230.50
			SD	27.34	54.32	19.18	32.72
9	12	Mid	$\bar{X}$	187.25	312.08	186.00	194.83
			SD	19.93	90.83	17.39	30.04
	12	Low	$\bar{X}$	165.00	265.00	177.83	190.58
			SD	27.65	43.92	14.90	19.73
Ttl.	36		$\bar{X}$	177.33	301.81	193.47	205.31
			SD	26.87	71.40	23.99	33.28

counts made on T-unit length on the pre and post WCT for the sample.

A three-way analysis of covariance (using the pretest scores as the covariate) was carried out to determine the existence of any significant differences among the main factors (treatment, grade, ability), and their interactions. Table XXXIX presents the results of this analysis.

TABLE XXXIX

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE TOTAL NUMBER OF WORDS IN EIGHTEEN T-UNITS (POST WCT)

Source	SS	df	MS	F	P
Treatment	351160.00	1	351160.00	213.04	.00*
Grade	5064.05	2	2532.03	1.54	.22
Treat. x Grade	4708.1	2	2354.36	1.43	.24
Ability	61319.0	2	30659.6	18.60	.00*
Grade x Ability	1453.34	4	3633.35	2.20	.07
Treat. x Ability	14.97	2	7487.00	4.54	.01*
Treat. x Grade x Ability	6168.79	4	1542.20	.94	.44
Cov. 1	27141.2	1	27141.2	16.47	.00*
Error	32472.8	197	1648.37		

* $p < .05$

The results indicated that (1) the experimental group used a significantly higher adjusted mean number of words (176.2) in the post WCT (18 T-units) than the students in the control group (95.4), (2) the ability groups differed significantly in the mean number of words used in the post WCT,

and (3) there was no significant difference in the mean number of words used by the three grade levels on the post WCT.

When multiple pairwise comparisons (using the adjusted test mean score) were carried out on the ability factor, it was found that (1) the high ability group used a significantly higher adjusted mean number of words (154.1) on the post WCT than was used by the low ability group (112.2), (2) the mid ability group used a significantly higher adjusted mean number of words (141.3) on the post WCT than the low ability group, and (3) there was no significant difference in the adjusted mean number of words used by the high ability group and the mid ability group.

Table XXXIX also indicated a significant interaction between the treatment factor and the ability factor. This interaction, presented graphically in Figure XIII, may be explained as follows: In the control group, the high ability students used a higher adjusted mean number of words on the post WCT than the mid ability students, and the mid ability students used a higher mean number of words on the post WCT than the low ability students. More specifically, the mid ability students used approximately twice the mean number of words used by the low ability students. In the experimental group, the high, mid, and low ability students not only increased their overall mean number of words used on the post WCT, but the mid ability students used approximately the

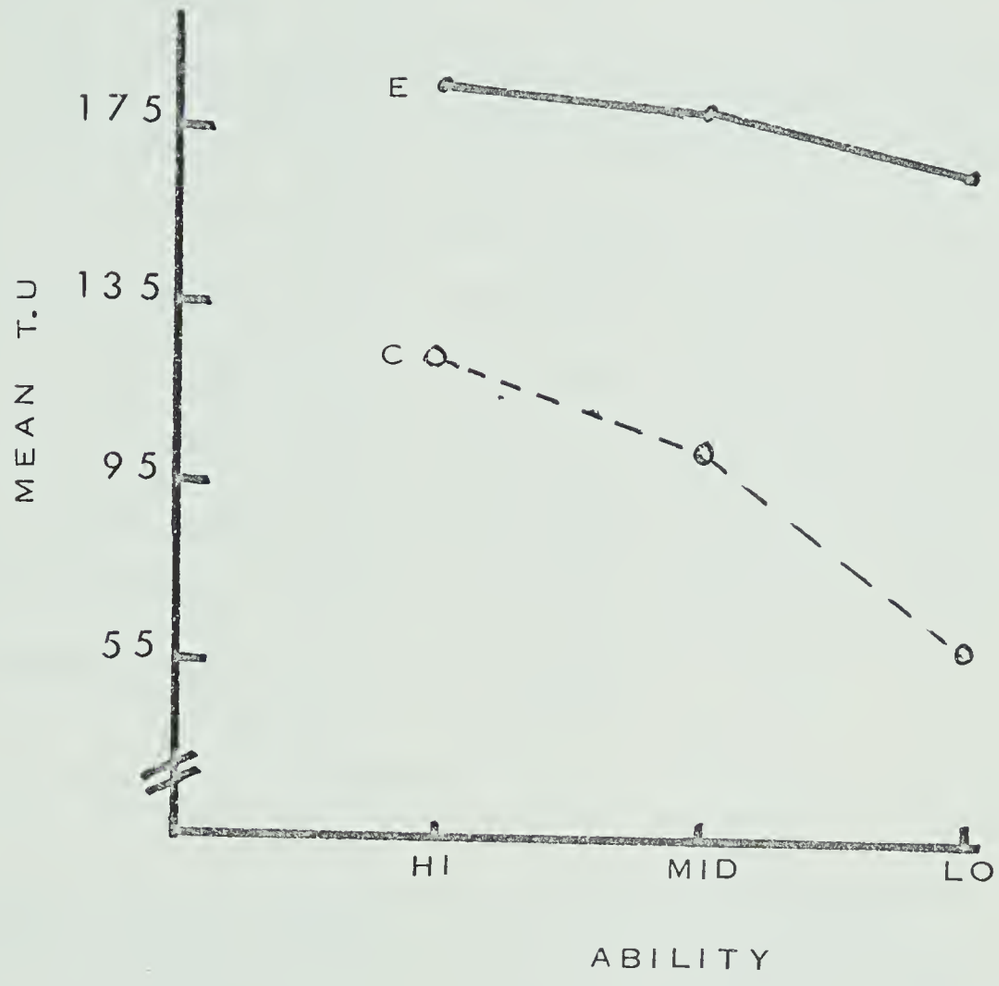

FIGURE XIII

INTERACTION BETWEEN TREATMENT AND ABILITY FOR FREQUENCY COUNT ON T-UNIT LENGTH (POST WRITTEN COMPOSITION)

same adjusted mean number of words on the post WCT as the high ability students. The low ability students increased their mean number of words, to such an extent, that they fell only slightly below the adjusted mean number for the mid ability students.

A significant difference was found among the groups in the concomitant variable, namely the Written Composition (Frequency Count: T-unit Length) pretest. The source of variance represented by the covariate was eliminated by the adjustment of post Written Composition (Frequency Count: T-unit Length) scores for differences in pretest performance.

The total number of words used on the post WCT produced significant F values for the treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 9

> Students in the experimental group in grades seven, eight, and nine will not use a significantly higher frequency of short base clauses in the post Written Composition Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

Table XL presents by treatment, by grade, and by ability, the means and standard deviations for the frequency count made on the total number of words used by students in their base clauses on the pre and post WCT.

A three-way analysis of covariance (using the pretest scores as the covariate) was carried out to determine the

TABLE XL

MEANS AND STANDARD DEVIATIONS BY TREATMENT, BY GRADE, AND BY ABILITY, FOR THE TOTAL NUMBER OF WORDS USED IN THE BASE CLAUSES ON THE WRITTEN COMPOSITION TEST (18 T-UNITS)

Gr.	N	Ability	$\bar{X}$ SD	Experimental Group		Control Group	
				Pre Wr. Comp. Test	Post Wr. Comp. Test	Pre Wr. Comp. Test	Post Wr. Comp. Test
	12	H	$\bar{X}$	170.33	107.08	131.08	122.41
			SD	32.89	12.91	17.03	12.95
7	12	Mid	$\bar{X}$	157.75	109.17	128.17	127.83
			SD	23.76	15.30	15.18	15.46
	12	Low	$\bar{X}$	157.67	109.33	124.00	124.33
			SD	29.48	16.43	21.52	12.17
Ttl.	36		$\bar{X}$	161.92	108.53	127.75	124.86
			SD	29.56	14.99	18.34	13.78
	12	H	$\bar{X}$	128.33	97.33	139.33	136.83
			SD	17.70	8.92	11.29	24.39
8	12	Mid	$\bar{X}$	138.00	95.67	134.92	135.67
			SD	10.67	8.79	13.38	16.57
	12	Low	$\bar{X}$	134.25	104.97	136.67	142.50
			SD	9.76	9.13	17.25	19.73
Ttl.	36		$\bar{X}$	133.53	99.31	136.97	138.33
			SD	13.78	9.81	14.31	20.70
	12	H	$\bar{X}$	139.58	102.33	157.17	167.42
			SD	16.89	14.88	16.94	31.60
9	12	Mid	$\bar{X}$	143.58	108.08	137.25	194.83
			SD	20.10		18.04	
	12	Low	$\bar{X}$	132.17	112.92	139.75	153.58
			SD	13.47	17.39	14.17	11.37
Ttl.	36		$\bar{X}$	138.44	107.78	144.72	155.89
			SD	17.68	14.50	18.70	22.39

existence of any significant differences among the main factors (treatment, grade, ability), and their interactions. Table XLI presents the results of this analysis.

TABLE XLI

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE TOTAL NUMBER OF WORDS USED IN THE BASE CLAUSES (POST WCT)

Source	SS	df	MS	F	P
Treatment	64281.9	1	64281.9	233.61	.00*
Grade	709.66	2	354.83	1.23	.28
Treat. x Grade	707.31	2	353.65	1.29	.28
Ability	9646.02	2	4823.01	17.53	.00*
Grade x Ability	1107.28	4	276.82	1.01	.41
Treat. x Ability	5898.95	2	2949.47	10.72	.00*
Treat. x Grade x Ability	1592.97	4	398.24	1.45	.30
Cov. 1	764.86	1	764.86	2.78	.10
Error	54209.0	197	275.17		

* $p < .05$

The results indicated that (1) the experimental group used a significantly lower adjusted mean number of words (90.7) in the base clauses on the post WCT, than the students in the control group (125.9), (2) the ability groups differed significantly in the mean number of words used in the base clauses on the WCT, and (3) there was no significant difference in the mean number of words used in the base clauses by the three grade levels in the post WCT.

When multiple pairwise comparisons (using the adjusted

test mean score) were carried out on the ability factor, it was found that (1) the low ability group used a significantly higher adjusted mean number of words in the base clauses (114.5) on the post WCT than the mid ability group (111.3), (2) the low ability group used a significantly higher mean number of words in the base clauses on the post WCT than the high ability group (99.1), and (3) there was no significant difference in the mean number of words used in the base clauses by the mid ability and the low ability groups on the post WCT.

Table XLI also indicated a significant interaction between the treatment factor and the ability factor. This interaction, presented graphically in Figure XIV, may be explained as follows: Students in the control group used a higher mean number of words in the base clauses than students in the experimental group. More specifically, the high ability students in the control group used a higher mean number of words in their base clauses than the high ability students in the experimental group; the mid ability students in the control group used a higher mean number of words in their base clauses than the mid ability students in the experimental group; and the low ability students in the control group used a higher mean number of words in their base clauses than the low ability students in the experimental group. Furthermore, the high ability and the low ability students in the control group used approximately the same mean number of words in their base clauses, whereas,

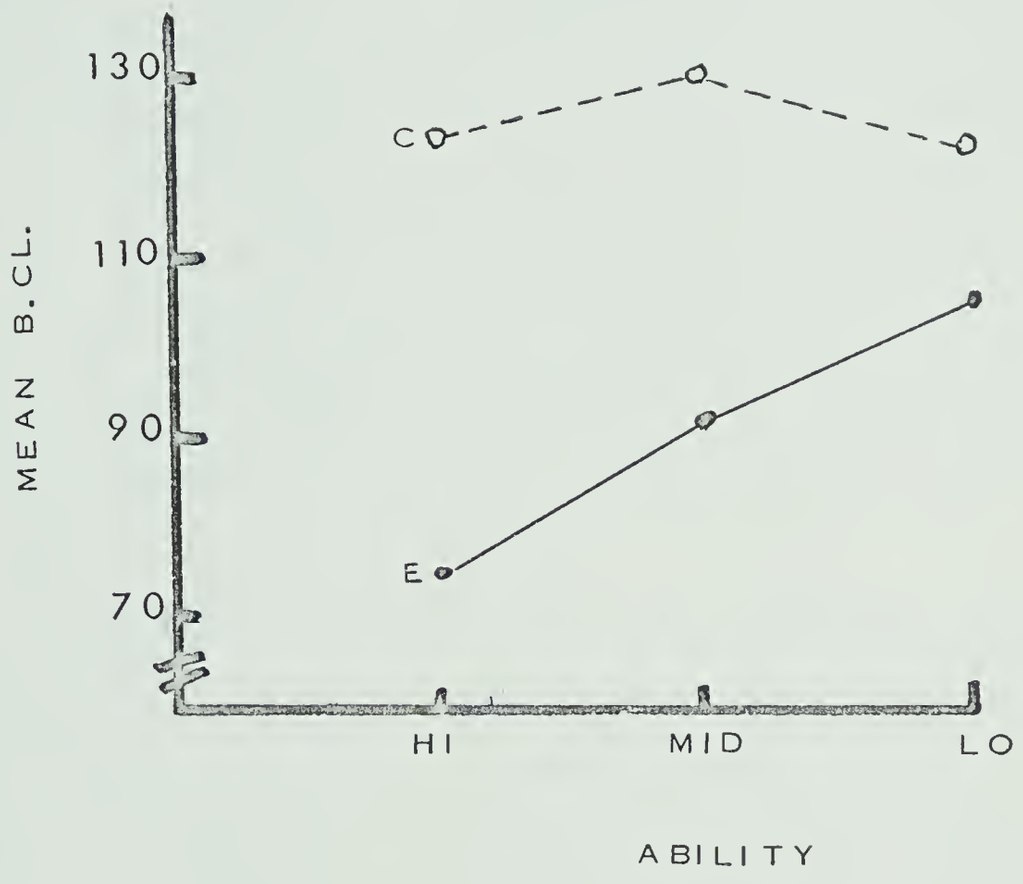

FIGURE XIV

INTERACTION BETWEEN TREATMENT AND ABILITY FOR FREQUENCY COUNT ON THE TOTAL WORDS USED IN THE BASE CLAUSES (POST WCT)

the mid ability students used a slightly higher mean number of words in their base clauses than the high and the low ability students.

In the experimental group, however, a different pattern emerged. The high ability students used a lower mean number of words in their base clauses than the mid ability students and the low ability students, and a lower mean number than any of the ability groups in the control group; the mid ability students used a lower mean number of words in their base clauses than the low ability students and a lower mean number than any of the ability groups in the control group; and the low ability students used a lower mean number of words in their base clauses than any of the ability groups in the control group.

No significant difference was found among the groups on the concomitant variable, namely the Written Composition (Frequency Count: Total Words in Base Clauses) pretest.

The total number of words used in the base clauses on the post WCT produced significant F values for the treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 10a

> Students in the experimental group in grades seven, eight, and nine will not use a significantly higher frequency of Intra-T-unit coordination structures in the post Written Composition Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

Table XLII presents by treatment, by grade, and by ability the means and standard deviations for the frequency count of the total number of intra-T-unit coordination structures used by students on the pre and post WCT.

A three-way analysis of covariance was carried out to determine the existence of any significant differences among the main factors (treatment, grade, ability), and their interactions. The results of this analysis are presented in Table XLIII.

The results indicated that (1) the experimental group used a significantly higher adjusted mean number of intra-T-unit coordination structures (5.4) on the post WCT than the control group (0.0), (2) there was a significant difference in the mean number of intra-T-unit coordination structures used by the three grade levels on the post WCT, and (3) there was a significant difference in the mean number of intra-T-unit coordination structures on the post WCT.

When multiple pairwise comparisons (using adjusted test mean scores) were carried out on the grade factor, it was found that (1) the grade nine students used a significantly higher number of intra-T-unit coordination structures (3.2)

TABLE XLII

MEANS AND STANDARD DEVIATIONS BY TREATMENT, BY GRADE, AND BY ABILITY, FOR THE FREQUENCY COUNT ON THE TOTAL NUMBER OF INTRA-T-UNIT COORDINATION STRUCTURES USED ON THE WRITTEN COMPOSITION TEST

Gr.	N	Ability	$\bar{X}$ SD	Experimental Group		Control Group	
				Pre Wr. Comp. Test	Post Wr. Comp. Test	Pre Wr. Comp. Test	Post Wr. Comp. Test
7	12	H	$\bar{X}$	.00	4.83	.00	.00
			SD	.00	2.48	.00	.00
	12	Mid	$\bar{X}$	.00	4.67	.00	.00
			SD	.00	2.53	.00	.00
	12	Low	$\bar{X}$	.00	4.17	.00	.00
			SD	.00	2.48	.00	.00
Ttl.	36		$\bar{X}$	.00	4.56	.00	.00
			SD	.00	2.51	.00	.00
8	12	H	$\bar{X}$	.00	6.42	.08	.00
			SD	.00	2.40	.28	.00
	12	Mid	$\bar{X}$	.00	5.17	.00	.00
			SD	.00	1.72	.00	.00
	12	Low	$\bar{X}$	.00	4.83	.00	.00
			SD	.00	9.13	.00	.00
Ttl.	36		$\bar{X}$	.00	5.47	.03	.00
			SD	.00	2.39	.16	.00
9	12	H	$\bar{X}$	.00	6.91	.00	.00
			SD	.00	2.14	.00	.00
	12	Mid	$\bar{X}$	.00	7.50	.00	.00
			SD	.00	3.34	.00	.00
	12	Low	$\bar{X}$	.00	3.92	.00	.00
			SD	.00	2.50	.00	.00
Ttl.	36		$\bar{X}$	.00	6.11	.00	.00
			SD	.00	3.12	.00	.00

TABLE XLIII

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE TOTAL NUMBER OF INTRA-T-UNIT COORDINATION STRUCTURES (POST WCT)

Source	SS	df	MS	F	P
Treatment	1554.93	1	1554.93	453.75	.00*
Grade	31.72	2	15.86	4.63	.01*
Treat. x Grade	31.72	2	15.86	4.63	.01*
Ability	22.01	2	11.00	3.21	.04*
Grade x Ability	22.30	4	5.58	1.63	.17
Treat. x Ability	22.01	2	11.00	3.21	.04*
Treat. x Grade x Ability	22.30	4	5.58	1.63	.17
Cov. 1	70617.4	1	70617.4	2060.72	1.00
Error	675.09	197	3.43		

* $p < .05$

on the post WCT than was used by the grade seven students (2.4), (2) there was no significant difference in the mean number of intra-T-unit coordination structures used by grade nine students and grade eight students (2.5), and (3) there was no significant difference in the mean number of intra-T-unit coordination structures used by grade eight students and grade seven students.

When multiple pairwise comparions (using the adjusted test mean scores) were carried out on the ability factor, it was found that (1) the high ability students used a significantly higher mean number of intra-T-unit coordination structures (3.2) on the post WCT than was used by the low ability students (2.3), (2) there was no significant difference

in the mean number of intra-T-unit coordination structures used by the high ability students and the mid ability students (2.7) on the post WCT, and (3) there was no significant difference in the mean number of intra-T-unit coordination structures used by the mid ability and low ability students on the post WCT.

Table XLIII indicated a significant interaction between the treatment factor and the grade factor. This interaction, presented graphically in Figure XV, may be explained as follows: In the control group, grade nine students used a higher mean number of intra-T-unit coordination structures than was used by the grade eight and grade seven students; and the grade eight students used a higher mean number of intra-T-unit coordination structures than the grade seven students. In the experimental group, however, the grade seven, eight, and nine students not only increased their use of the intra-T-unit coordination structures on the post WCT, but the grade seven students used the same mean number of intra-T-unit coordination structures as was used by the grade eight and the grade nine students.

Table XLIII also indicated a significant interaction between the treatment factor and the ability factor. This interaction, presented graphically in Figure XVI, may be explained as follows: In the control group, a developmental pattern emerged. More specifically, the high ability students used a higher mean number of intra-T-unit coordination

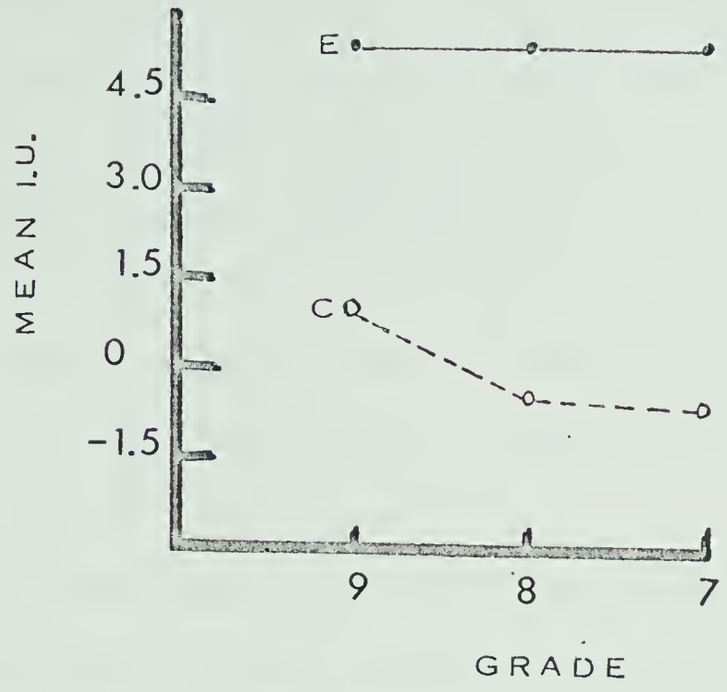

FIGURE XV

INTERACTION BETWEEN TREATMENT AND GRADE FOR THE FREQUENCY COUNT ON THE TOTAL NUMBER OF INTRA-T-UNIT COORDINATION STRUCTURES (POST WCT)

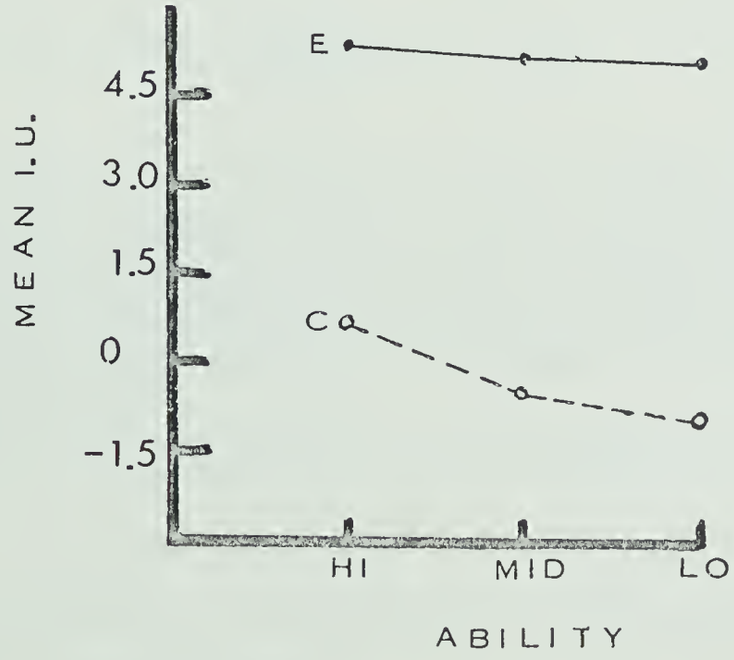

FIGURE XVI

INTERACTION BETWEEN TREATMENT AND ABILITY FOR THE FREQUENCY COUNT ON THE INTRA-T-UNIT COORDINATION STRUCTURES (POST WCT)

structures on the post WCT than was used by the mid ability and low ability students; and the mid ability students used a higher mean number of intra-T-unit coordination structures than was used by the low ability students. In the experimental group, however, the high, mid, and low ability students not only increased their overall use of the intra-T-unit coordination structures, but the low ability students used approximately the same number as was used by the mid ability and the high ability students.

No significant difference was found among the groups on the concomitant variable, namely the Written Composition (Frequency Count: Total Intra-T-Unit Coordination Structures) pretest.

The total number of intra-T-unit coordination structures produced significant F values for the treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 10b

> Students in the experimental group in grades seven, eight, and nine will not use a significantly higher frequency of intra-T-unit coordination structures in the post Written Expressional Test than students in the control group when pretest performance is used as a covariate.

Table XLIV presents by treatment, by grade, and by ability, the means and standard deviations for the total number intra-T-unit coordination structures used by students on the pre and post WET.

TABLE XLIV

MEANS AND STANDARD DEVIATIONS BY TREATMENT, BY GRADE, AND BY ABILITY, FOR THE FREQUENCY COUNT ON THE TOTAL NUMBER OF INTRA-T-UNIT COORDINATION STRUCTURES USED ON THE WRITTEN EXPRESSIONAL TEST

Gr.	N	Ability	$\bar{X}$ SD	Experimental Group		Control Group	
				Pre WET	Post WET	Pre WET	Post WET
7	12	H	$\bar{X}$	1.08	7.33	.67	1.33
			SD	.49	2.69	.62	1.11
	12	Mid	$\bar{X}$	.67	6.00	.75	1.25
			SD	.94	2.08	.83	1.16
	12	Low	$\bar{X}$	.92	8.33	.83	.92
			SD	1.75	3.32	.97	1.19
Ttl.	36		$\bar{X}$	.89	7.22	.75	1.17
			SD	1.20	2.91	.83	1.17
8	12	H	$\bar{X}$	2.17	10.33	2.50	2.67
			SD	1.57	2.36	1.44	1.60
	12	Mid	$\bar{X}$	.75	8.50	1.00	1.42
			SD	1.16	2.78	1.00	1.19
	12	Low	$\bar{X}$	.83	9.83	1.50	1.33
			SD	1.14	3.39	.96	.75
Ttl.	36		$\bar{X}$	1.25	9.56	1.67	1.81
			SD	1.46	2.98	1.31	1.37
9	12	H	$\bar{X}$	2.33	8.75	2.33	2.33
			SD	1.93	1.74	1.65	1.80
	12	Mid	$\bar{X}$	1.25	8.33	.83	1.25
			SD	1.42	2.29	.69	.43
	12	Low	$\bar{X}$	1.25	7.50	1.33	2.08
			SD	1.23	3.20	1.18	1.75
Ttl.	36		$\bar{X}$	1.61	8.19	1.50	1.88
			SD	1.64	2.54	1.38	1.54

A three-way analysis of covariance (using the pretest scores as the covariate) was carried out to determine the existence of any significant differences among the main factors (treatment, grade, ability), and their interactions. Table XLV presents the results of this analysis.

TABLE XLV

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE INTRA-T-UNIT COORDINATION STRUCTURES ON THE WET

Source	SS	df	MS	F	P
Treatment	2437.39	1	2437.39	509.45	.00*
Grade	17.50	2	8.75	1.83	.16
Treat. x Grade	6.96	2	3.48	.73	.48
Ability	58.26	2	29.13	6.09	.00*
Grade x Ability	9.90	4	2.48	.52	.72
Treat. x Ability	36.05	2	18.03	3.77	.02*
Treat. x Grade x Ability	28.04	4	7.01	1.47	.21
Cov. 1	28.05	1	28.05	5.86	.01*
Error	942.49	197	4.78		

* $p < .05$

The results indicated that (1) the experimental group used a significantly higher adjusted mean number of intra-T-unit coordination structures (8.0) on the post WET than was used by the control group (1.2), (2) there was a significant difference in the mean number of intra-T-unit coordination structures used by the ability groups on the post WET, and (3) there was no significant difference in the mean number of

intra-T-unit coordination structures used on the post WET by the three grade levels.

When multiple pairwise comparisons (using the adjusted mean scores) were carried out on the ability factor, it was found that (1) the high ability group used a significantly higher mean number of intra-T-unit coordination structures (5.2) than the mid ability group (4.0), (2) there was no significant difference in the mean number of intra-T-unit coordination structures used by the high ability group and the low ability group (4.7) on the post WET, and (3) there was no significant difference in the mean number of intra-T-unit coordination structures used by the mid ability group and the low ability group on the post WET.

Table XLV also indicated a significant interaction between the treatment factor and the ability factor. This interaction, presented graphically in Figure XVII, may be explained as follows: In the control group the high ability students used a higher mean number of intra-T-unit coordination structures than the mid ability students, and a slightly higher mean number than the low ability students on the post WET. The mid ability students used a lower mean number of intra-T-unit coordination structures than was used by the high and the low ability students. In the experimental group, however, the high, mid, and low ability students not only increased the overall use of the intra-T-unit coordination structures on the post WET, but the low ability students used

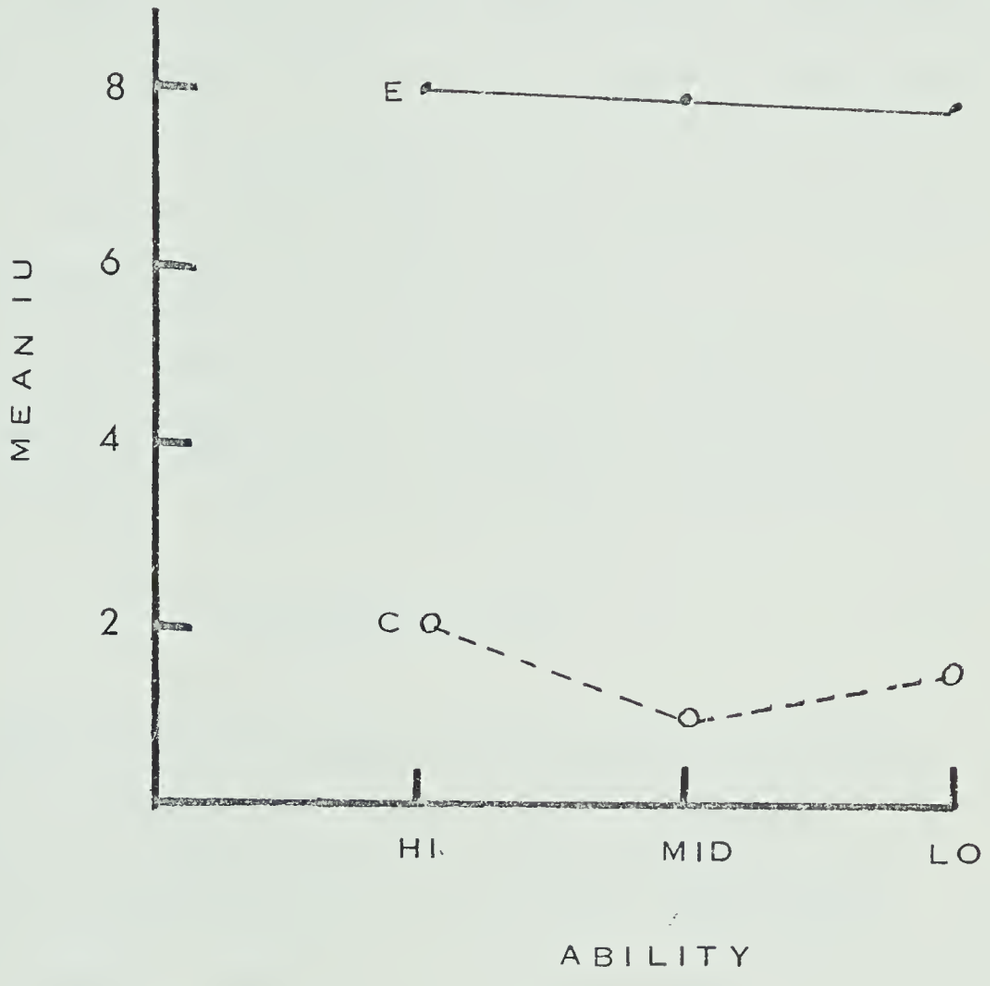

FIGURE XVII

INTERACTION BETWEEN TREATMENT AND ABILITY FOR THE FREQUENCY COUNT ON THE TOTAL NUMBER OF INTRA-T-UNIT COORDINATION STRUCTURES (POST WET)

approximately the same mean number as was used by the high ability and the mid ability students.

A significant difference was found among the groups in the concomitant variable, namely the Written Composition (Frequency Count: Intra-T-Unit Coordination Structures) pretest. The source of variance represented by the covariate was eliminated by the adjustment of post Written Expressional (Frequency Count: Intra-T-Unit Coordination Structures) scores for differences in pretest performance.

The total number of intra-T-unit coordination structures used on the post WET produced significant F values for the treatment effect. The null hypothesis was therefore rejected.

HYPOTHESIS 11a

> Students in the experimental group in grades seven, eight, and nine will not demonstrate a more mature style of writing in the post Written Composition Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

The results presented in Tables XVIII to XXI indicated that the scores on the post WCT produced significant F values for the experimental group. In this case, the null hypothesis was rejected.

The results presented in Tables XXIV, XXVIII, XXX, XXXII, XXXIV, XXXVI, XXXIX, XLI, and XLIII, indicated that the frequency counts on each of the criteria of the mature style of writing produced significant F values for the experimental group. In each case, the null hypothesis was rejected.

Since the scores on the post WCT, and the post WET produced significant F values for the experimental group, it may be concluded that the students in the experimental group demonstrated a more mature style of writing on these tests than students in the control group. The null hypothesis was therefore rejected.

HYPOTHESIS 11b

> Students in the experimental group in grades seven, eight, and nine will not demonstrate a more mature style of writing in the post Written Expressional Test than students in the control group at the same grade levels when pretest performance is used as a covariate.

The results presented in Tables X to XV indicated that the scores obtained on the post WET produced significant F values for the experimental group. For the total post WET, and for each of its subtests, the null hypothesis was rejected.

The results presented in Tables XXVII, XXIX, XXXI, XXXV, and XLV, indicated that the frequency counts on each of the criteria of the mature style of writing on the total post WET produced significant F values for the experimental group. The null hypothesis in each case was rejected.

Since the scores on the post WET and its subtests, and the frequency counts on the total WET produced significant F values for the experimental group, it may be concluded that the students in the experimental group demonstrated a more mature style of writing on these tests than the students in

the control group. The null hypothesis was therefore rejected.

RETENTION TEST

A retention test was administered to the experimental high, mid, and low ability subgroups in grades seven, eight, and nine on March 16, 1970, three months after the posttest was written. This test consisted of the WET, and one narrative descriptive paragraph. The purpose of the test was to determine the existence of any significant differences between the performance of students on the posttest and their performance on the retention test. The retention test was administered under the same conditions as the posttest.

A one by three by three analysis of covariance was used in analyzing the data. In this analysis, the scores obtained on the post WET subtests, and the post narrative descriptive paragraph were used as the covariates. If the analyses revealed significant covariate effects, this would indicate that there was a significant change in the performance of the students in the ability subgroups. The results of these analyses are presented under the appropriate headings.

Subtest 1

The results of the analysis of covariance (using the pretest scores as the covariate) for Subtest 1 are presented in Table XLVI.

TABLE XLVI

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE RETENTION TEST: WET - SUBTEST 1

Source	SS	df	MS	F	P
Grade	172.28	2	86.14	7.04	.00*
Ability	98.92	2	49.46	4.04	.02*
Grade x Ability	63.51	4	15.88	1.30	.29
Cov. 1	7.53	1	7.53	.62	.44
Error	538.34	44	12.24		

* $p < .05$

The results indicated that (1) there was a significant difference in the performance of the three grade levels on the retention WET Subtest 1, (2) there was a significant difference in the performance of the ability groups on the retention WET Subtest 1, and (3) there was no significant difference in the covariate effect on the retention WET Subtest 1.

When multiple pairwise comparisons (using the adjusted retention test mean scores) were carried out on the grade factor, it was found that (1) students in grade nine achieved a significantly higher retention test mean score (33.0) than the students in grade eight (30.0), (2) students in grade nine achieved a significantly higher mean score on the retention WET Subtest 1 than students in grade seven (28.5), and (3) there was no significant difference in the performance of students in grade seven and students in grade eight on the

retention WET Subtest 1.

When multiple comparisons (using the adjusted retention test mean scores) were carried out on the ability factor, it was found that (1) the high ability subgroup achieved a significantly higher mean score (32.3) on the retention WET Subtest 1 than the mid ability subgroup (29.0), (2) there was no significant difference in the performance of the high ability subgroup and the low ability subgroup (30.4) on the retention WET Subtest 1, and (3) there was no significant difference in the performance of the mid ability subgroup and the low ability subgroup on the retention WET Subtest 1.

Table XLVI also indicated that there was no significant interaction between the grade factor and the ability factor.

Subtest 2

The results of the analysis of covariance presented in Table XLVII indicated that (1) there was a significant difference in the performance of the three grade levels on the retention WET Subtest 2, (2) there was no significant difference in the performance of the ability groups on the retention WET Subtest 2, and (3) there was no significant difference in the covariate effect on the retention WET Subtest 2.

When multiple pairwise comparisons (using the adjusted mean scores) were carried out, it was found that (1) the grade nine students (127.5) did not differ significantly from the

grade eight students (117.5), on the retention WET Subtest 2, (2) the grade eight students did not differ significantly from the grade seven students (116.4) on the retention WET Subtest 2, and (3) the grade nine students did not differ significantly from the grade seven students on the retention WET Subtest 2. This indicated that although an overall significant difference existed among the three grade levels this difference could not be localized more specifically to any pairwise combination of the three grade levels.

Table XLVII also indicated that there was no significant interaction between the grade factor and the ability factor.

TABLE XLVII

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE RETENTION TEST: WET - SUBTEST 2

Source	SS	df	MS	F	P
Grade	6550.9	2	3275.45	3.22	.05*
Ability	2636.69	2	1318.35	1.30	.28
Grade x Ability	3770.83	4	942.71	.92	.46
Cov. 1	1976.52	1	1976.52	1.95	.17
Error	44690.00	44	1015.68		

* $p < .05$

Subtest 3

The results of the analysis of covariance (using the posttest scores as the covariate) for the WET Subtest 3 are presented in Table XLVIII.

TABLE XLVIII

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE RETENTION TEST: WET - SUBTEST 3

Source	SS	df	MS	F	P
Grade	8966.11	2	4483.05	4.39	.02*
Ability	18737.00	2	9368.51	9.18	.00*
Grade x Ability	2649.60	4	662.40	.65	.63
Cov. 1	916.93	1	916.93	.90	.35
Error	44917.00	44	1020.84		

* $p < .05$

The results indicated that (1) there was a significant difference in the performance of the three grade levels on the retention WET Subtest 3, (2) there was a significant difference in the performance of the ability groups on the retention WET Subtest 3, and (3) there was no significant difference in the covariate effect on the retention WET Subtest 3.

When multiple pairwise comparisons (using the adjusted retention test mean scores) were carried out on the grade factor, it was found that (1) the grade nine students achieved a significantly higher mean score (169.8) on the retention WET Subtest 3 than grade seven students (138.0), (2) there was no significant difference in the performance of grade nine students and grade eight students (146.7) on the retention WET Subtest 3, and (3) there was no significant difference in the performance of grade eight students and

grade seven students on the retention WET Subtest 3.

When multiple pairwise comparisons (using the adjusted retention test mean scores) were carried out on the ability factor, it was found that (1) the high ability subgroup achieved a significantly higher mean score (177.7) on the retention WET Subtest 3 than the low ability subgroup (143.5), (2) the high ability students achieved a significantly higher mean score on the retention WET Subtest 3 than the mid ability students (133.1), and (3) there was no significant difference in the performance of the mid ability subgroup and the low ability subgroup on the retention WET Subtest 3.

Table XLVIII also indicated that there was no significant interaction between the grade factor and the ability factor.

Subtest 4

The results of the analysis of covariance (using the posttest scores as the covariate) for the WET Subtest 4 are presented in Table XLIX.

The results indicated that (1) there was a significant difference in the performance of the ability subgroups on the retention WET Subtest 4, (2) there was no significant difference in the performance of the three grade levels on the retention WET Subtest 4, and (3) there was no significant covariate effect on the retention WET Subtest 4.

When multiple pairwise comparisons (using the adjusted

TABLE XLIX

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE RETENTION TEST: WET - SUBTEST 4

Source	SS	df	MS	F	P
Grade	3912.50	2	1956.25	2.83	.07
Ability	8987.83	2	4493.91	6.50	.00*
Grade x Ability	4909.66	4	1227.42	1.78	.15
Cov. 1	37.63	1	37.63	.05	.82
Error	30421.00	44	691.37		

* $p < .05$

retention test mean scores) were carried out on the ability factor, it was found that (1) the high ability subgroup achieved a significantly higher mean score (124.1) on the retention WET Subtest 4 than the low ability subgroup (94.9), (2) the mid ability subgroup achieved a significantly higher mean score (128.2) on the retention WET Subtest 4 than the low ability subgroup, and (3) there was no significant difference in the performance of the high ability and the mid ability subgroups on the retention WET Subtest 4.

Table XLIX also indicated that there was no significant interaction between the grade factor and the ability factor.

Subtest 5

The results of the analysis of covariance (using the pretest scores as the covariate) for the retention WET Subtest 5 are presented in Table L.

TABLE L

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE RETENTION TEST: WET - SUBTEST 5

Source	SS	df	MS	F	P
Grade	20004.50	2	10002.3	3.10	.056
Ability	15128.70	2	7564.35	2.35	.12
Grade x Ability	3086.37	4	771.59	.24	.91
Cov. 1	4391.41	1	4391.41	1.36	.25
Error	141799.00	44	3222.70		

* $p < .05$

The results indicated that (1) there was no significant difference in the performance of the three grade levels on the retention WET Subtest 5, (2) there was no significant difference in the performance of the ability subgroups on the retention WET Subtest 5, and (3) there was no significant covariate effect on the retention WET Subtest 5.

Table L also indicated that there was no significant interaction between the grade factor and the ability factor.

Written Composition (Narrative Descriptive Paragraph)

The results of the analysis of covariance (using the posttest scores as the covariate) for the retention WCT are presented in Table LI.

The results indicated that (1) there was a significant difference in the performance of the three grade levels on the retention WCT, (2) there was a significant difference in the performance of the ability subgroups on the retention

TABLE LI

SUMMARY OF ANALYSIS OF COVARIANCE FOR THE RETENTION TEST: WRITTEN COMPOSITION - NARRATIVE DESCRIPTIVE PARAGRAPH

Source	SS	df	MS	F	P
Grade	10.35	2	5.17	6.47	.00*
Ability	8.36	2	4.18	5.23	.01*
Grade x Ability	3.22	4	.81	1.01	.41
Cov. 1	0.69	1	0.69	0.86	.47
Error	35.18	44	0.80		

* $p < .05$

WCT, and (3) there was no significant covariate effect on the retention WCT.

When multiple pairwise comparisons (using the adjusted retention test mean scores) were carried out on the grade factor, it was found that (1) the grade nine students achieved a significantly higher mean score (5.2) on the retention WCT than the grade seven students (4.2), (2) the grade eight students achieved a significantly higher mean score (5.0) on the retention WCT than the grade seven students, and (3) there was no significant difference in the performance of the grade nine students and the grade eight students on the retention WCT.

When multiple pairwise comparisons (using the adjusted retention WCT mean scores) were carried out on the ability factor, it was found that (1) the high ability subgroup (5.3) did not differ significantly from the mid ability subgroup

(4.8) on the retention WCT, (2) the mid ability subgroup did not differ significantly from the low ability subgroup (4.5) on the retention WCT, and (3) the high ability subgroup did not differ significantly from the low ability subgroup on the retention WCT.

Table LI also indicated that there was no significant interaction between the grade factor and the ability factor.

DISCUSSION OF THE RESULTS

This section of Chapter IV is confined to a discussion of the results presented in the preceding section. The discussion is organized and presented under appropriate headings.

THE WRITTEN COMPOSITION TEST

The WCT, used to evaluate students' writing performance, represents an "open" measuring device, "open" in the sense that, in this test, the syntactic options available to the students are not specific. Thus, the students were given the freedom to select from their language those alternatives which would enable them to express their thoughts clearly, accurately, and effectively.

The results of the analysis of covariance for the total WCT indicated that the experimental subgroup achieved a significantly higher adjusted mean score than the students in the control subgroup. When each of the three modes of writing

was analyzed independently, the results indicated that the experimental subgroup consistently achieved significantly higher adjusted mean scores on the post WCT than the control subgroup.

The paragraphs were evaluated by three different judges (experienced junior high school teachers of English) who were not aware of the nature of the experiment, or the nature of the instructional materials. The analysis of the marks awarded by these judges suggest that students in the experimental subgroup, given instruction in Christensen's rhetoric of the sentence, demonstrated a more mature style of writing on the post WCT than students in the control subgroup who were given instruction in writing through traditional grammar.

A frequency count of the total number of free modifiers used in these paragraphs revealed that the free modification structures were extensively employed by the students. It is interesting to recall Bateman's claim that when a paragraph becomes rich and full it is almost always heavily modified, and this modification illustrates a notable growth in the use of more complex structures.[186] In addition, the results of the analysis indicated that students in the experimental group used a higher number of free modifiers than the students in the control group. The fact that the

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[186] Bateman, loc. cit., p. 459.

judges assigned higher scores to the paragraphs written by students in the experimental group may also suggest that these students wrote prose that was stylistically more mature. If, indeed, the experimental group did write mature prose, this may further suggest that they were aware of a wider range of available devices, and were able to select appropriate ones and work them into effective patterns. Gorrell,[187] Gleason,[188] and Ives[189] share the view that the ability to make "felicitous selection" is one dimension of the writer's ability that can be increased through appropriate training. The results of this study seem to support their view.

A detailed examination of the students' writing was conducted in order to investigate (1) the frequency of use of specific syntactic structures (free modifiers), (2) the total number of words written in the pre and post WCT (18 T-units), (3) the total number of words used in the base clauses in the pre and post WCT, and (4) the total number of intra-T-unit coordination structures used in the pre and post WCT. These criteria were selected as indices of a mature style of writing (see Chapters II and III).

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[187] Gorrell, loc. cit., p. 142.

[188] Gleason, loc. cit., p. 4.

[189] Ives, loc. cit., p. 364.

Frequency Count: Total Free Modifiers and the Written Composition Test

The results indicated that the experimental group used a significantly higher adjusted mean number of free modifiers on the post WCT than students in the control group.

When each of the free modifiers was analyzed independently, it was found that the students in the experimental group consistently used a higher adjusted mean number of each of the free modification structures on the post WCT than students in the control group.

These results suggest that students in the experimental group in grades seven, eight, and nine who were given instruction in Christensen's rhetoric of the sentence were able to select from the syntactic options available to them, a greater variety of these options to express their thoughts on the post WCT.

The results of the analysis of covariance also revealed significant interactions among the main factors.

The Interaction of Treatment and Ability

An examination of the interaction of treatment and ability on the frequency of total free modifiers revealed that while there was some variation within the experimental group in the adjusted mean number of free modifiers used on the post WCT, the largest differences occurred within the control group. More specifically, the range of means for the control group was greater than the range of means for the

experimental group. Furthermore, the use of free modifiers by the high, mid, and low ability students in the control group showed a developmental pattern in which the high ability students used a greater number of free modifiers than the mid ability students, and the mid ability students used a greater number of free modifiers than the low ability students. In the experimental group, however, the high, mid, and low ability students not only increased the number of free modifiers used on the post WCT, but the low ability students used approximately the same number of free modifiers as the high ability and the mid ability students.

The results of this interaction suggest that instruction in Christensen's rhetoric of the sentence not only improved the students' ability to use the free modification structures in their writing, but it also tended to minimize the differences among the ability groups in grades seven, eight, and nine. The developmental pattern exhibited by the performance of the high, mid, and low ability students in the control group, was almost totally eliminated in the performance of the high, mid, and low ability students in the experimental group.

An examination of the interaction between treatment and ability for the frequency of the total number of free noun phrases revealed that while there was some variation within the experimental group in the number of free noun phrases used on the post WCT, the largest differences occurred

within the control group. More specifically, the range of means for the control group was greater than the range of means for the experimental group. Furthermore, in the control group, the high ability students used a greater number of free noun phrases than the mid ability and low ability students, and the mid ability students used a greater number of free noun phrases than the low ability students. The performance of the ability levels in the control group again revealed a developmental pattern. In the experimental group, however, the high, mid, and low ability students not only increased their overall use of free noun phrases on the post WCT, but all three ability groups used approximately the same number of free noun phrases.

The results of this interaction suggest that instruction in Christensen's rhetoric of the sentence not only improved the students' ability to use the free noun phrase in their writing, but such instruction also tended to minimize the differences among the ability groups in grades seven, eight, and nine. The developmental pattern exhibited by the performance of the high, mid, and low ability students in the control group was almost totally eliminated in the performance of the high, mid, and low ability students in the experimental group.

An examination of the interaction between the treatment factor and the ability factor for the frequency count made on the total number of free adjective phrases used on the post WCT revealed that while there was no variation within

the experimental group in the adjusted mean number of free adjective phrases used on the post WCT, large differences occurred between the high and the low ability students, and the mid and low ability students in the control group. Although a developmental pattern did not clearly emerge, there still remained noticeable differences in the means for the ability levels within the control group. In the experimental group, however, the high, mid, and low ability students not only increased their overall use of free adjective phrases on the post WCT, but the three ability groups used the same adjusted mean number of these syntactic structures on this test.

The results of this interaction suggest that instruction in Christensen's rhetoric of the sentence not only increased the students' ability to use the free adjective phrase in their writing, but it also tended to minimize the differences among the ability groups in grades seven, eight, and nine. The ability differences exhibited by the performance of students in the control group were totally eliminated in the performance of the high, mid, and low ability students in the experimental group.

The interaction between the treatment factor and the ability factor for the frequency of the total number of free absolute phrases used on the post WCT revealed that in the control group, the high ability students used a greater number of free absolute phrases of the post WCT than the mid and low

ability students; the low ability students used a greater number of free absolute phrases on this test than the mid ability students; and the mid ability students used fewer free absolute phrases than the high and low ability students. This interaction indicated that there were differences in the adjusted mean number of free absolute phrases used by the ability levels in the control group. In the experimental group, however, the high, mid, and low ability students not only increased their use of free absolute phrases, but the three ability groups used approximately the same mean number of these syntactic structures on this test.

The results of this interaction suggest that instruction in Christensen's rhetoric of the sentence not only increased the students' ability to use free absolute phrases in their writing, but it also tended to minimize the differences among the ability groups in grades seven, eight, and nine. The differences in the performance of the high, mid, and low ability students in the control group were almost completely eliminated in the performance of the high, mid, and low ability students in the experimental group.

The results of the interactions between treatment and ability, presented in the foregoing paragraphs, indicate a fairly consistent pattern in the performance of the students in the control group. The interactions invariably reveal that the high ability students perform better than the mid and the low ability students, and that the mid ability

students perform better than the low ability students. Loban[190] reports similar findings in the students' use of such structures as infinitives, gerunds, and participles. (These structures are not used as free modifiers by Loban's sample.) Unfortunately, no research studies were available that examined the students' use of free modifiers in their writing. However, it should be pointed out that while this study corroborates Loban's findings for the performance of the control group, it further suggests that ability differences in writing may be greatly minimized. The results of this study consistently indicate that when students are given instruction in the rhetoric of the sentence, the low and mid ability groups perform almost equally as well as the high ability group.

The Interaction of Grade and Ability

The interaction between the grade and ability for the frequency of use of free noun phrases in the post WCT revealed that within grades, (1) the high ability students in grade nine used a greater number of free noun phrases than the mid and the low ability students; the mid ability students used a greater number of free noun phrases than the low ability students; and the low ability students used fewer noun phrases on the post WCT than the high and the low ability students. Thus within grade nine, a developmental pattern

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[190]Loban, loc. cit., p. 84.

was quite evident; (2) in grade eight, the high ability students used more free noun phrases than the mid and low ability students; the low ability students used a slightly greater mean number of free noun phrases on this test than the mid ability students; and the mid ability students used a lower mean number of free noun phrases than the high and low ability students; (3) in grade seven, the mid ability students used a greater number of free noun phrases than the high and low ability students; the high ability students used more free noun phrases on this test than the low ability students; and the low ability students used fewer free noun phrases than the high and mid ability students.

Within grade eight and grade nine, the high and the mid ability students exhibited a developmental pattern in their use of free noun phrases. The low ability students in grade eight used a greater number of free noun phrases on the post WCT than the low ability students in grade nine. No clear pattern emerged from the performance of the high, mid, and low ability students in grade seven.

The interaction also revealed that across grade levels the high ability students showed a developmental pattern -- the grade nine high ability students used more free noun phrases on the post WCT than the grade eight high ability and the grade seven high ability students, and the grade eight high ability students used a greater number of free noun phrases on this test than the grade seven high ability students.

No clear pattern emerged in the performance of the mid ability and low ability students across grades seven, eight, and nine.

Frequency Count on T-Unit Length: Total Number of Words on the Written Composition Test

The frequency count of the total number of words used on the post WCT (18 T-units) indicated that students in the experimental group used a significantly higher mean number of words than the students in the control group.

Hunt[191] claims that as a measure of maturity, the T-unit has the advantage of preserving all the subordination achieved by the writer, and all his coordination between words and phrases and subordinate clauses. He further suggests that the T-unit is the best index for determining maturity in language. The frequency count in this study indicates that students in the experimental group used a greater mean number of words on the WCT than the control group. If Hunt's index is in fact a good index of maturity the results of this study may suggest that students in the experimental group write more stylistically mature prose than students in the control group.

A significant interaction was found between the treatment factor and the ability factor. This interaction revealed that while there is some variation within the experimental

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[191] Hunt, loc. cit., pp. 23 and 36.

group in the adjusted mean number of words used on the post WCT, the largest differences occurred within the control group. More specifically, the range of means for the control group was greater than the range of means for the experimental group. Furthermore, in the control group, the high ability students used a greater number of words than the mid and low ability students and the mid ability students used a greater number of words on this test than the low ability students. Again the performance of the ability levels on the post WCT indicated a distinct developmental pattern. In the experimental group, however, the high, mid, and low ability students not only increased the overall number of words but the mid ability students used approximately the same number of words on this test as the high ability students. The low ability students fell only slightly below the adjusted mean for the mid ability students.

The results of this interaction suggest that instruction in Christensen's rhetoric of the sentence not only improved the students' ability to select from their language those syntactic structures which enabled them to increase the mean length of their T-units, but such instruction also tended to minimize the differences among the ability levels in grades seven, eight, and nine. The developmental pattern exhibited by the performance of the high, mid, and low ability students in the control group was almost eliminated in the performance of the high, mid, and low ability students in the experimental

group.

Frequency Count: Total Number of Words in Base Clauses in the Written Composition Test

The analysis of the total number of words used in the base clauses on the post WCT indicated that students in the experimental group used a significantly lower adjusted mean number of words in their base clauses on the post WCT than students in the control group. This suggests that instruction in Christensen's rhetoric of the sentence increases the students' ability to control their use of language to the extent that, in writing, they were able to keep their base clauses short. This permits the students to add levels of generality to the base clauses to make them richer in meaning.

This finding may be further clarified if the frequency count on the T-unit length is considered. Students in the experimental group used a higher mean number of words (computed from the raw scores) on the post WCT than they used on the pretest. The experimental group used a lower mean number of words (computed from the raw scores) on the post WCT than they used on the pretest. The conclusion that may be drawn from this is that, to a large degree, the difference lies in the addition of free modifiers. Furthermore, the results of the analysis of the frequency count made on the total free modifiers indicated that students in the experimental group used a higher mean number of free modifiers on the post WCT than students in the control group. This supports Christensen's

observation that professional writers keep their base clauses short, and this enables them to lengthen their T-units. The conclusion he draws is that the difference lies in the use of free modifiers.[192] If students in the experimental group in grades seven, eight, and nine are using the same stylistic pattern as professional writers use, then it may be suggested that instruction in the rhetoric of the sentence does have a beneficial effect on the written composition of these students.

A significant interaction was found between the treatment factor and the ability factor. The results indicate that the high, mid, and low ability students in the control group used a greater number of words in their base clauses than was used by the students in the experimental group. In the control group, the high, mid, and low ability students used approximately the same number of words in their base clauses, but in the experimental group, the high ability students used fewer words in their base clauses than the mid and low ability students, and the mid ability students used a smaller number of words than the low ability students.

These results may suggest that when given instruction in the rhetoric of the sentence, students are able to control their language to such an extent that they are able to keep their base clauses short. This permits the students to add layers of meaning, or levels of generality, to the base

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[192] Christensen, "The Problem of Defining A Mature Style," p. 578.

clauses to make them richer in meaning. It is these additions to the base clauses that result in the longer T-unit. This is contrary to Hunt's explanation of how the T-unit is lengthened. He suggests that the T-unit is lengthened by producing longer clauses through a process of addition or embedding, or by increasing the number of subordinate clauses. According to Hunt, what really accounts for the added length of clauses are nominals (noun phrases and clauses) used in place of nouns and pronouns, and modifiers embedded before and after nouns to lengthen the noun phrase.[193] Christensen[194] points out, however, that there is not much scope for the addition of free modifiers within the clause where bound modifiers or one-word modifiers are often used. An examination of the students' writing reveals that the short base clause permits the addition of layers of modification structures. Consequently, those students in the experimental group who used short base clauses were able to increase the length of their T-units through the addition of free modifiers.

Frequency Count: Intra-T-Unit Coordination Structures on the Post Written Composition Test

The results of the frequency count on the total number of intra-T-unit coordination structures used on the post WCT indicated that the students in the experimental group used a

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[193] Hunt, loc. cit., p. 22.

[194] Christensen, op. cit., p. 576.

higher adjusted mean number of these syntactic constructions than the students in the control group.

The use of intra-T-unit coordination structures suggests that the students do not merely select a single syntactic construction to express their thought. To form an intra-T-unit coordination structure, they must select and use a parallel series of constructions. The fact that students in the experimental group used a significantly higher adjusted mean number of these structures than the students in the control group may further suggest that students in the experimental group not only learned a variety of the options available to them, but they may have also learned to make a conscious selection of those options in writing their thoughts.

The results of the analysis of covariance also revealed significant interactions which are discussed under the appropriate headings.

Interaction of Treatment and Grade

The interaction between the treatment factor and the grade factor for the frequency count on the number of intra-T-unit coordination structures used on the post WCT may be explained as follows: The use of the intra-T-unit coordination structure by the grade seven, eight, and nine students in the control group indicated a developmental pattern. More specifically, the grade nine students used a greater number of intra-T-unit coordination structures on the post WCT than the

grade eight and grade seven students; the grade eight students used a greater number of these structures than the grade seven students. In the experimental group, the grade seven, eight, and nine students not only increased their overall use of the intra-T-unit coordination structures, but the grade seven and grade eight students used the same mean number of these structures as the grade nine students.

The results suggest that instruction in the rhetoric of the sentence not only increased the students' ability to select and use a variety of syntactic structures in their writing, but it almost completely eliminated the developmental pattern exhibited in the performance of grade seven, eight, and nine students in the control group.

The performance patterns exhibited by students in grades seven, eight, and nine in the control group are in many respects similar to those reported by Hunt, and O'Donnell, Norris, and Griffin. Hunt's study indicates that the length of T-units increases with age. In his view, more complex constructions appear in students' writing as they grow older. Thus students in grade twelve write longer T-units than students in grade eight, and students in grade four, because they are able to produce longer clauses through a process of addition or embedding, or by increasing the number of subordinate clauses.[195] O'Donnell, Norris, and Griffin, also

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[195] Hunt, loc. cit., p. 22.

found that the complexity of sentence pattern increases as the grade level increases.[196] The suggestion is that the variability in the language performance of students may be a function of age or grade. While the findings of this study for the control group confirm the findings mentioned above, they further suggest that grade differences appearing in the use of specific syntactic constructions may be minimized through instruction in the rhetoric of the sentence.

Interaction of Treatment and Ability

The interaction between the treatment factor and the ability factor for the frequency count of the total number of intra-T-unit coordination structures used on the post WCT may be described as follows: The use of the intra-T-unit coordination structure by the high, mid, and low ability students indicated a developmental pattern in which the high ability students used a higher number of intra-T-unit coordination structures on the post WCT than the mid and low ability students, and the mid ability students used a greater number of these structures on the post WCT than the low ability students. In the experimental group, however, the high, mid, and low ability students not only increased their overall use of the intra-T-unit coordination structures on the post WCT, but the low ability students used approximately the same mean number of these structures as the high ability

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[196] O'Donnell, Norris, and Griffin, loc. cit., pp. 59-60.

and the mid ability students.

These results suggest that instruction in the rhetoric of the sentence not only increased the students' ability to use a higher mean number of intra-T-unit coordination structures in their writing, but such instruction tended to minimize the differences among the ability groups in grades seven, eight, and nine. The developmental pattern exhibited by the performance of the high, mid, and low ability students in the control group was almost totally eliminated in the performance of the high, mid, and low ability students in the experimental group.

THE WRITTEN EXPRESSIONAL TEST AND ITS SUBTESTS

The WET and its Subtests represent a "closed" measuring device for evaluating the students' ability to recognize and organize mature sentences, to add levels of generality to base clauses to make the sentences richer in meaning, and to combine sentences through modification, subordination, and coordination, in the sense that the syntactic options available to the students are generally specified and are somewhat restricted.

The results indicated that the experimental group achieved a significantly higher total adjusted mean score on the post WET than the control group. In each of the Subtests, the experimental group also consistently achieved significantly higher mean scores than the control group. These

results suggest that students in the experimental group in grades seven, eight, and nine who were given instruction in the rhetoric of the sentence demonstrated a more mature style of writing than the students in the control group at the same grade levels who were given instruction in writing through traditional grammar.

These findings are consistent with those obtained in the analysis of the WCT scores.

Frequency Count: Free Modifiers

The free modifiers described in Chapters II and III were selected as indices of a mature style of writing. The frequency of use of these modifiers was tabulated and was used in the analysis of the data.

The results of the analysis for the total number of free modifiers used on the post WET indicated that students in the experimental group achieved a significantly higher adjusted mean number of free modifiers than the students in the control group. These findings are also consistent with those obtained in the analysis of the total free modifiers used on the post WCT.

When the free modifiers were analyzed independently, it was found that the students in the experimental group consistently used a significantly higher mean number of free modifiers on the post WET than students in the control group. On the basis of these results it may be suggested that students who were given instruction in the rhetoric of the sentence demonstrated

a more mature style of writing than students in the control group who were given instruction in writing through traditional grammar. The results also revealed significant interactions among the main factors. These interactions will now be discussed.

The Interaction of Treatment and Ability

An examination of the interaction between treatment and ability indicated that while there was some variability within the experimental group in the number of free modifiers used on the post WET, the largest differences occurred within the control group. The range of means for the control group was greater than the range of means for the experimental group. Furthermore, the performance of the high, mid, and low ability students in the control group indicated a developmental pattern in which the high ability students used a greater number of free modifiers than the mid ability students, and the mid ability students used a greater number of free modifiers than the low ability students. In the experimental group, however, the high, mid, and low ability students increased their overall use of free modifiers on the post WET. The low ability students used approximately the same number of free modifiers as the high ability and the mid ability students. These results suggest that instruction in the rhetoric of the sentence not only improved the students' ability to use the free modification structures in their writing, but it also

tended to eliminate the developmental pattern exhibited by the performance of the students in the control group.

An examination of the interaction between treatment and ability indicated that the mid ability students in the control group used a higher mean number of free adjective phrases than the high and the low ability students. Although no predictable pattern emerged in the control group, there was evidence of a greater range of means indicating that differences in ability persisted after the students in the control group were given instruction in writing through traditional grammar. In the experimental group, however, the high, mid, and low ability students not only increased the mean number of free adjective phrases used in the post WET, but the low ability students used the same mean number of free adjective phrases as was used by the high and the mid ability students. Thus, it may be suggested that grades seven, eight, and nine students who received instruction in rhetoric of the sentence developed a greater potential for using the free adjective phrases in a "closed" writing situation.

An examination of the interaction between treatment and ability revealed that in the control group, grade eight and grade nine students used approximately the same number of free prepositional phrases on the post WET; and the grade seven students used a much lower adjusted number than grade eight and grade nine students. In the experimental group, the

grade seven, eight, and nine students not only increased their overall use of free prepositional phrases, but the grade seven students used approximately the same number of free prepositional phrases on the post WET as was used by the grade eight students. The variation between grade seven and grade nine in the experimental group was not as great as the variation between the same grade levels in the control group. The results of this interaction may suggest that the students who were given instruction in the rhetoric of the sentence developed a greater flexibility in their use of free prepositional phrases than students given instruction in writing through traditional grammar.

An examination of the interaction between treatment and ability reveals that in the control group, the high ability students used a greater number of free verb phrases than the mid and the low ability students, and the mid ability students used a lower mean number of free verb phrases than the low ability students. After receiving instruction in writing through traditional grammar a noticeable variation in the performance among the high, mid, and low ability students in the control group still existed. In the experimental group, however, the high, mid, and low ability students not only increased their overall use of free verb phrases, but the mid and low ability students used a slightly greater number of these syntactic structures than the high ability students. This may suggest that instruction in the rhetoric of the

sentence had a beneficial effect on the writing performance of grade seven, eight, and nine students. In addition, the differences exhibited among the ability levels in the control group were eliminated in the experimental group.

Interaction of Treatment and Grade

An examination of the interaction between treatment and grade revealed that in the control group, the grade nine students used a greater number of free modifiers on the post WET than the grade eight students, and the grade eight students used a greater number of free modifiers than the grade seven students. Thus, in the control group, a developmental pattern emerged. In the experimental group, the grade seven and grade eight students used a slightly higher mean number of free modifiers than the grade nine students. The results of this interaction may suggest that while instruction in writing through traditional grammar resulted in differential effects on the performance of students in grades seven, eight, and nine, instruction in the rhetoric of the sentence tended to minimize these effects to such an extent, that students in the experimental group in grades seven and eight demonstrated approximately the same flexibility in using the free modification structures as the students in grade nine.

Intra-T-Unit Coordination Structures on the WET

The results indicated that the students in the experimental group used a significantly higher number of intra-T-unit

coordination structures on the post WET than students in the control group. An examination of the mean number (computed from the raw scores) of intra-T-unit coordination structures used by the control group revealed that even though the WET generally specified, and to an extent controlled, the options needed for combining the sentences, the students in the control group used a lower number of intra-T-unit coordination structures than the students in the experimental group. A further examination of the results revealed that the experimental group not only increased their use of the intra-T-unit coordination structures on the posttest, but they also used a greater number of these structures than the students in the control group.

An examination of the interaction between treatment and ability revealed that in the control group, the high ability students used a greater number of intra-T-unit coordination structures than the low ability and the mid ability students. The mid ability students used a lower mean number of these structures than the low ability students. The results also indicated that the range of means within the control group was greater than the range of means within the experimental group. In the experimental group, the high, mid, and low ability students not only increased their overall use of the intra-T-unit coordination structures, but the low ability and the mid ability students used approximately the same number of these structures as the high ability

students. This interaction may suggest that students in the experimental group who were given instruction in the rhetoric of the sentence were able to use a greater number of intra-T-unit coordination structures in combining sentences than students in the control group who were given instruction in writing through traditional grammar.

These results suggest that instruction in the rhetoric of the sentence provided students in grades seven, eight, and nine with an adequate number of syntactic options which enabled them to increase their flexibility in writing. As suggested by Loban and other researchers, it is not the pattern which is important, but what is done to achieve flexibility within the pattern that proves to be a measure of effectiveness and control of language. Loban further points out that participial phrases, gerunds, appositives, and other clauses can contribute to compression and effectiveness.[197] The use of these constructions in intra-T-unit coordination structures further illustrates the students' competence in manipulating their language. To use an intra-T-unit coordinating structure the students must not only choose the initial head-word, but they must consciously select the other head-words and arrange them in a coordinating sequence to form a parallel series of the syntactic constructions they may choose to write.

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[197] Loban, op. cit., pp. 59-61.

RETENTION TEST

The results of the retention test for the experimental group indicated that for each of the WET Subtests, the covariate, namely the corresponding post WET Subtests, was not found to be significant. There was no significant difference between the students' posttest performance and their performance on the retention WET Subtests. A similar result was found for the WCT.

These results suggest that students in the ability subgroups in grades seven, eight, and nine who were given instruction in the rhetoric of the sentence were not only able to recall the syntactic structures taught to them, but they were also able to use these structures in their writing at a later time.

CHAPTER V

SUMMARY, CONCLUSIONS, AND SUGGESTIONS FOR FURTHER RESEARCH

SUMMARY

Review of the Experiment

The experiment was designed to study the effects of instruction in the rhetoric of the sentence on the written composition of students at the grade seven, eight, and nine levels.

Six classes were required at each of the three grade levels, making a total of eighteen classes. Three classes at each level were randomly designated as the experimental group and three were randomly designated as the control group. At each grade level, three teachers were asked to teach both the experimental and the control groups, each teacher teaching one experimental and one control group.

Both groups were given a pretest consisting of a WET and a WCT. Five weeks of instruction followed. The control group was given instruction in writing through traditional grammar, and the experimental group was given instruction in Francis Christensen's rhetoric of the sentence. The experiment concluded with the writing of the posttest during the sixth week.

A stratified random sampling technique was used to

select 216 students from the experimental and control groups at the three grade levels.

The students' written compositions were evaluated by three experienced junior high school teachers of English. The WET was scored by the investigator and a sample of the papers was rechecked by two teachers in the experimental school. The investigator counted and tabulated the frequency of use of the criteria selected as indices of a mature style of writing. The data were analyzed by a three-way analysis of covariance using the pretest scores as the covariate. The level of significance used throughout the study was the .05 level.

Findings

The main findings of the investigation may be stated as follows:

(1) Students in the experimental group achieved significantly higher adjusted mean scores on the post WET and its Subtests than the students in the control group.

(2) Students in the experimental group achieved significantly higher adjusted mean scores on the post WCT than students in the control group.

(3) (a) The frequency count made on the total number of free modifiers on the post WCT indicated that the experimental group used a significantly higher number of these syntactic structures than the control group.

(b) When each free modification structure was analyzed independently, the results indicated that the

experimental group consistently used a significantly higher adjusted mean number of these syntactic structures than the control group on the posttest.

(4) (a) The frequency count made on the total number of free modifiers used on the post WET and its Subtests indicated that the experimental group used a significantly higher adjusted mean number of these syntactic structures than the control group.

(b) When each free modification structure was analyzed independently, the results indicated that the experimental group consistently used a higher adjusted mean number of these syntactic structures than the control group on the posttest.

(5) For the frequency count made on the T-unit length (total number of words on the post WCT), it was found that the experimental group used a higher adjusted mean number of words than the control group.

(6) For the frequency count on the total number of words used in the base clauses on the post WCT, it was found that the experimental group used a significantly smaller adjusted mean number of words than the control group.

(7) (a) For the frequency count made on the total number of intra-T-unit coordination structures used on the post WCT, it was found that the experimental group used a significantly greater adjusted mean number of these structures than the control group.

(b) For the frequency count made on the total number of intra-T-unit coordination structures used on the post WET, it was found that the experimental group used a significantly greater adjusted mean number of these syntactic structures than the control group.

(8) The scores on the WCT, the WET, its Subtests, and the frequency count on each test for each of the indices of a mature style of writing produced significant F values for the treatment effect. The results consistently showed that the experimental group demonstrated a more mature style of writing than the control group.

The results indicated that significant interactions occurred among the main factors. The findings of these interactions are summarized under the appropriate headings.

Interaction of Treatment and Ability

The interaction between treatment and ability revealed a general pattern (see Figures III, IV, VI, VIII, IX, X, XII, XIII, XIV, XVI, and XVIII). In the control group, the high ability students invariably performed better than the mid and the low ability students; and the mid ability students performed better than the low ability students. In the experimental group, however, the low ability students performed almost equally as well as the high and mid ability students.

Interaction of Treatment and Grade

The interaction between treatment and grade also indicated a general pattern (see Figures V, XI, and XV). In the control group, the grade nine students performed better than the grade eight and the grade seven students, and the grade eight students performed better than the grade seven students. In the experimental group, however, posttest performance minimized grade differences. The grade seven students generally performed equally as well as the grade eight and grade nine students when a mature style of writing was the primary consideration.

Interaction of Grade and Ability

No clear pattern emerged from this interaction (see Figure VII).

Retention Test

(1) There was no significant difference in the performance of students in the experimental group on the post WET and the retention WET.

(2) There was no significant difference in the performance of students in the experimental group on the post WCT (Narrative Descriptive Paragraph) and the corresponding retention test.

CONCLUSIONS AND IMPLICATIONS

Since the sample was limited to 216 students from one junior high school in the city of Edmonton, any conclusions must be presented as tentative, regardless of the statistical significance obtained. However, on the basis of the data, and in view of the specific findings listed above, several generalizations seem justifiable.

The results of the study indicate that under the conditions of the experiment, instruction in the rhetoric of the sentence has a beneficial effect on the written composition of grade seven, eight, and nine students. The consistently higher scores obtained by the experimental group on every analysis strengthens the contention that instruction in the rhetoric of the sentence can help students develop a mature style of writing. Although further research is needed to provide additional evidence as to its effectiveness, teachers may very well find Christensen's rhetoric a systematic approach toward helping students develop a sentence form that will facilitate the generating of ideas.

The results of this study further suggest that students are capable of learning and applying the principles of writing suggested in the rhetoric of the sentence. The students in the experimental group consistently obtained higher mean scores on every analysis than the students in the control group. The retention test further indicates that even after a period of three months had elapsed students were able to

write just as well as they wrote on the posttest.

The results of the study also provide strong evidence against the conventional belief that more complex syntactic structures would be more effectively taught at higher grade levels. While, on the one hand, the performance of the control group may suggest that grade differences do appear, the performance of the experimental group strongly suggests that such grade differences are minimized when students are given instruction in the rhetoric of the sentence. Furthermore, the fact that grade seven students in the experimental group demonstrate the same facility in using the free modification structures as the grade nine students, suggests that complex syntactic structures can be learned and can be used effectively by the grade seven students. The writer, however, does not advocate a formal study of grammar at the grade seven level. The claim is, that under the conditions of the experiment, the grade seven, eight, and nine students develop a greater facility for using a wider variety of syntactic structures in their writing than the students in the control group.

In addition, the results provide evidence which suggests that instruction in the rhetoric of the sentence tends to minimize ability differences within grades. The results indicate that in the control group there is great differentiation in performance among the ability levels. In the experimental group, however, ability differences are greatly reduced. In addition, the results may be encouraging

to teachers who have been inhibited in their teaching by the popularly held notion that writing is, to a large extent, a function of intelligence. Surely, style in writing is not determined exclusively by biological inheritance. Within its limitations, this study offers strong evidence to show that a mature style can be acquired through systematic instruction. In fact, this study demonstrates that instruction in the rhetoric of the sentence not only tends to reduce ability differences in writing within grades, but such instruction helps students develop a greater awareness of the syntactic options available in their language, a greater facility for using these options, and, consequently, greater fluency in writing prose that is stylistically mature.

This investigation may be regarded as a tentative first approach to the study of instruction in the rhetoric of the sentence in grades seven, eight, and nine composition classrooms. It was deliberately limited by using Christensen's theory in a fairly restricted way, and by using a small but structured population. Nevertheless, the investigation did produce certain significant findings. These findings indicate that Christensen's theory of the rhetoric of the sentence has possibilities for developing students' maturity in writing. However, further investigation is required before it can be implemented in the written composition program for grade seven, eight, and nine students.

SUGGESTIONS FOR FURTHER RESEARCH

The present study has answered several questions, but it has also revealed several areas which need further research. A few of them are presented in the following paragraphs.

The writer is not aware of any other study designed to test the effectiveness of the rhetoric of the sentence in developing students' writing ability. There is, therefore, a definite need to replicate this study, using larger groups of students and teachers, longer periods of instruction, and a variety of subject matter.

This study provides no direct evidence relating to the processes students use to exploit the resources of their language. There is need for knowledge about these processes, about the difficulty in acquiring command of the various syntactic constructions, and about how such acquisition can be facilitated.

This investigation did not attempt to determine the level of difficulty of specific free modifiers in a hierarchical way. Such a study may provide valuable information for the sequential arrangement of these syntactic structures for purposes of instruction.

Finally, more direct information is required to determine whether the modes of discourse -- description, narration, exposition -- have any effect on the frequency and the kind of free modification structures used by students.

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A P P E N D I C E S

A P P E N D I X A

General Instructions to Teachers Participating in the Study

INSTRUCTIONS TO TEACHERS PARTICIPATING IN THE STUDY

The instructional units included in this booklet are based on Francis Christensen's "Generative Rhetoric of the Sentence". Several lessons are included. Each lesson attempts to develop a single concept dealing with features of the Rhetoric of the Sentence. Detailed procedures for teaching the lessons are outlined. Assignments based on each lesson are included. A supplementary list of sentences written by mature writers, illustrating the use of features of the Rhetoric of the Sentence, is also included. This list is to be used by teacher and student as it provides additional reference material for study.

PLEASE FOLLOW THE DIRECTIONS OUTLINED BELOW AS CLOSELY AS POSSIBLE

(1) You are asked to familiarize yourself with each lesson, with the assignment based on each lesson, and with the supplementary list of sentences, prior to instruction of lessons.

(2) You are asked to follow the procedures outlined in each lesson as closely as possible.

(3) You are asked to use the materials based on the Rhetoric of the Sentence with the experimental groups only. If students in the experimental groups bring to class examples of sentences and/or paragraphs illustrating the use of the syntactic structures taught in class, you may discuss this material with them. You may encourage students in the experimental groups to search out such material for discussion in the classroom.

(4) Although the procedures in the lesson ask you to develop 2-3 sentences to clarify specific syntactic structures, you may develop as many examples as are necessary to make the concept meaningful to the students.

(5) Be sure that students understand a concept before proceeding to another. You may repeat a lesson if this repetition makes the concept more meaningful to the students.

(6) Students must do the assignments in class. You may discuss and clarify problems which arise in working out the assignments. You may work out some of the assignments with the class.

(7) Students in the control groups must follow the regular writing program. A deliberate effort must be made to avoid using the instructional material on the rhetoric of the sentence with students in the control groups.

(8) Writing Assignments:

(a) Students in both the experimental and control groups must be given the same number of writing assignments. A total of six one-paragraph compositions is suggested for each group.

(b) Please use the following guide:

(i) Descriptive - Two one-paragraph compositions.
(ii) Narrative-Descriptive - Two one-paragraph compositions.
(iii) Expository - Two one-paragraph compositions.

(c) Suggested time for assignments in paragraph writing:

(i) End of first week - Descriptive paragraph.
(ii) End of second seek - Narrative-Descriptive paragraph.
(iii) End of third week - Expository paragraph.
(iv) During fourth week - One narrative-descriptive spaced out.
(v) During fifth week - One expository paragraph.

(d) Paragraphs should be not less than fifteen sentences long.

(e) Paragraphs must be evaluated and returned to students with suggestions for improvement. Time must be provided for students to make the necessary revisions. The investigator will assist in evaluating the compositions.

(9) Please avoid using the instructional materials prepared for the experimental groups in the classrooms designated control groups.

(10) The investigator will be available at all times and will assist you in any way he can. Feel free to call him at any time. He would appreciate the opportunity to observe your classrooms during the experiment.

Thank you for your cooperation.

A P P E N D I X B

Units of Work Based on the Rhetoric of the Sentence

INTRODUCTORY LESSON

Objectives:

1. To introduce students to the concept of the "free modifier".
2. To introduce to the students the concepts "noun head", "verb head".

Introduction: Read to students:

I am sure you will agree with me that writing seems complicated and unnatural. We will not pretend that it is simple and natural. The way to deal with anything that is complicated is to break it down into its elements and to arrange those elements in sequence. If the sequence is right, in each lesson we will be learning just one new thing but we will be using again and again what we have already learned.

The sentences and paragraphs that we will use are the work of professional writers, men and women who make their living by writing. The aim of this series of lessons is to help you see how these writers use language, and to help you say well whatever it is you have to say.

We will have to learn a few terms but only to enable you to discover the word classes of your language, the forms these classes take, and the patterns or structures they enter into to make sentences. We will emphasize, however, how these structures can best be used - what is most effective.

Presentation:

As a starting point, let us examine an observation made by John Erskine, a novelist, and a teacher of writing, (students should have copies of statement).

Read to Students:

When you write, you make a point, not by subtracting as though you sharpened a pencil, but by adding ... what you wish to say is found not in the noun but what you add to qualify the noun. The noun is only a grappling iron to hitch your mind to the reader's. The noun by itself adds nothing to the reader's information; it is the name of something he knows already, and if he does not know it, you cannot do business with him. The noun, the verb, and the main clause serve merely as a base on which the meaning will rise.

THE MODIFIER IS THE ESSENTIAL PART OF ANY SENTENCE.
John Erskine.

Read again with class.

"The modifier is the essential part of any sentence."

To see how meaning is to be found chiefly in the modifier, let us examine various kinds of "heads" and their modifiers.

Procedures:

1. Place on B.B. Noun Head

2. Write sentence - He was a tall, handsome boy.

Explain: In this sentence, boy is a noun, the head to which the modifiers are attached.

The words tall and handsome are adjectives modifying the noun boy. They are part of the main clause of the sentence and are not set off from the word they modify. These modifiers are called "bound modifiers". They are not separated from the main or base clause by punctuation. Elicit examples from students.

We can see that whatever meaning this sentence has is not to be found in the noun boy, but in the added modifiers. He was a boy tells us nothing.

Meaning is found in the added modifiers. e.g. tall; handsome.

Emphasize - Not all modifiers are bound modifiers.

3. Let us examine the following sentence.

   Write on B.B.

   She saw him a man, young, full of vigour, making the world glow again for her. - D.H. Lawrence

4. In this sentence, the modifiers young, full of vigour, and making the world glow again for her, are separated or set off from the main clause by punctuation.

   The base clause is, She saw him a man.

   The noun man in the base clause tells us little.

   The meaning in this sentence is to be found in the added modifiers.

   Modifiers which are set off from the main clause by punctuation are called "free modifiers".

5. What are the modifiers? (young; full of vigour; making ... for her.)

* The free modifier is the type of modifier we will be examining, since it can be better manipulated for more effective writing.

6. Write on B.B. Verb Head

- Place sentence on B.B.

The picadors galloped jerkily around the ring.
- Ernest Hemingway

- In this sentence, the verb head galloped is modified by the adverb jerkily, a bound modifier.

- The verb galloped gives us some meaning, but adding jerkily lets us see how the picadors galloped.

* We will not be concerned with bound modifiers, since they cannot be manipulated as readily as free modifiers.

7. The following sentence contains examples of free modifiers that we will be studying throughout this program.

Place on B.B.

The little birds were working, scratching in the leaves, flying restlessly a few feet and scratching again.
- Steinbeck - The Red Pony

8. In this sentence the base clause or main clause is, The little birds were working.

9. The rest of the sentence consists of free modifiers, additions to the base clause which show the manner in which the birds were working.

Discuss the free modifiers, showing students how the verbals or verb heads are used to add details or description to the base clause.

As you can see, the meaning is found not so much in the verb, but rather in the modifiers added to the verb.

(a) In this writing course, the bound modifier will be considered as word modifiers.

e.g. The pudgy man ate greedily

The bear ambled slowly over the hill.

Because you can and do use these modifiers we will not concentrate on them. We will try to make use of the free modifiers in our writing.

(b) All modifiers set off from the base clause by punctuation will be referred to as free modifiers.

e.g. It was a long head, bony, tight of skin, and set on a neck as stringy and muscular as a celery stalk. - Steinbeck

He sits highly, poised, upright, wooden-faced in the saddle, the broken bat raked at a swaggering angle.

(c) (i) Noun heads are words modified by adjectives and adjective phrases. e.g. He was a tall boy, young and strong.

(ii) Verb heads are verbs or verbals used to add details to the base clause. e.g. He hobbled slowly across the room, limping a little, dragging his left leg as if it were broken.

Emphasize: The base or main clause is short - it presents the action in a very general way. The modifiers make the action more vivid.

10. Ask students to read and study the sentences and paragraphs presented to them as a home work exercise, noting particularly how the writers use the free modifier.

11. Work out two or three examples with students, helping them to use the free modifier. You may begin by giving them a base clause:

e.g. He shuffled across the room, _____
_____

e.g. The waves lashed against the shore, _____
_____

PRINCIPLE OF ADDITION

Objectives

1. To demonstrate to students that writing is essentially a process of "addition".
2. To help students recognize the fact that free modifiers added to base clauses initially, medially, and finally.

Introduction

Read to students: When a person speaks, his spoken language goes in only one direction, forward. If you wish to add information to a statement you have already made, or if you wish to restate it, you must add to what you have already said. You must add modifying words, phrases, or clauses. Writing is, in many respects, similar to speaking, because when you write you add one word after another.

When you add a modifier to a noun, to a verb, or to a base clause, you may add it either before, or within, or after what it modifies. I will illustrate this on the B.B.

Initial Modifier	,	base clause	
Base clause	,	medial modifier,	rest of base clause,
Base clause	,	final modifier	.

Many mature writers use more final modifiers than initial or medial modifiers.

The mark which sets off the free modifier is the comma. (see diagram). You may also use a dash, a colon, or parentheses.

Presentation

1. Write the following sentence on the B.B.

   In the front room, his nails brown from the developer, his face pear-shaped, pear-coloured, bearing the great bone of nose he had not yet grown to, the kid watched the water dropping into the tank. - P.K. Page

2. Ask students to read the sentence loudly.

3. Question

   - What is the main or base clause in this sentence? (the kid watched .... the tank).
   - In what position is the base clause placed in the sentence? (at the end.)

- Does the base clause tell us much about the kid? (No.)
- What does the author do to sharpen the picture of the boy? (He adds modifiers.)

* Notice that these modifiers are set off from the base clause by commas. What name is given to such modifiers? (free modifiers.)

4. Let us examine the free modifiers.

Question:

- What group of words adds a detail to the noun kid?

In the front room, his nails ... developer, his face pear-shaped, pear-coloured, bearing .....

* Notice that each free modifier adds a specific detail to the base clause which is stated in very general terms.

- What is the author's purpose in using the free modifier initially? (He creates interest in what he is going to say, etc.)
- What is the purpose of the base clause? (It presents the action in a general way. This allows the writer the freedom to use free modifiers to supply the necessary details to sharpen the image of the action.)

5. Let us examine a sentence with a medial modifier.

- Write sentence on B.B.

Then a figure by the rail, tall, head up in the shadows, comes forward. - J. Conrad

Question:

- What is the base clause in this sentence? (Underline base clause. Then a figure by the rail, comes forward)

* Call attention to the general way in which the base clause is presented.

- What does the author do to sharpen the image of the figure? (He adds details by using the free modifiers)
- What are the free modifiers? (tall, head ... shadows.)

* Notice how the author sets off the free modifiers by using commas.

- Is it possible to place the two free modifiers at the end of the sentence? (Yes.)
- How would the sentence now read?

* The free modifier is movable. This gives the writer an unlimited choice for expressing his ideas.

6. Let us examine a sentence with final modifiers.

- Write sentence on B.B.

He sits erect, poised, looking quietly and steadily and quickly this way and that, his face calm, a little pale, alert. - William Faulkner

Question:

- What is the base clause in this sentence? (He sits erect.)

* Notice how short and how general the base clause is.

- Why does the author use this technique? (It enables him to go over the general statement adding more specific details or descriptions to the base clause.)

- What are the free modifiers? (poised, looking ... that, his face calm, a little pale, alert.)

* The author has added five groups of free modifiers to the base clause. The modifiers can be shifted to the base clause. The modifiers can be shifted to the initial position. However, most writers favour the use of the final modifiers.

7. Examine the following sentences in the same manner.

a) He put his hand to his side and coughed twice, a cough metallic, hollow, and tremendously loud. - J. Conrad

b) Six boys came over the hill half an hour early that afternoon, running hard, their heads down, their forearms working, their breath whistling. - Steinbeck

DIRECTION OF MOVEMENT

Objectives

1. To demonstrate to students that the position of the modifiers indicate the direction of movement or the direction of modification.
2. To illustrate to students that modifiers are usually placed in three positions: initial, medial and final.
3. To show that mature writers often use modifiers in the final position.

Introduction

Read to Students:

Our last lesson had to do with the principle of addition. We saw how writers make use of free modifiers in order to achieve effectiveness in their writing. Let us examine a sentence containing free modifiers.

Write sentence on B.B.

- Six boys came over the hill ..., running hard, their heads down, their forearms working, their breath whistling.

Question

- What is the main or base clause in this sentenct? (Six ... hill,)

* Notice that Steinbeck presents this picture in a general way. There are no descriptions or details. Now this is a good style, simply because it allows the writer to go over the first statement and add details in the form of free modifiers.

- What are the free modifiers? (running hard; heads down; their forearms working; their breath whistling).

* Notice that each modifier adds a further detail to the base clause. The secret in getting the appropriate modifiers is to concentrate on the object or the action itself. Steinbeck does this - he concentrates on the boys' heads, their forearms, their breath, their running.

- Today we will concentrate on the position of the free modifier in the sentence.

Procedures

1. Let us look at the same sentence written by Steinbeck.

   Six boys came over the hill, running hard, their heads down, their forearms working, their breath whistling.

2. Question

- What is the base clause? (Six ... hill.)
- What are the free modifiers? Where does the writer place them relative to the base clause? (Following the base clause, or at the end of the base clause.)
- Why does he do this? (It enables him to go over the same ground as the base clause adding details, descriptions, etc., to present a sharper or more specific picture.)

* In other words, if we draw an arrow over all the modifiers to point to the word or words they modify, the arrow must point backward to the base clause, e.g.,

Base clause free modifiers

In such a sentence we say that the direction of movement or modification is backward - that is, it goes back to the base clause.

3. Let us look at a sentence in which the modifiers are placed at the beginning of the sentence.

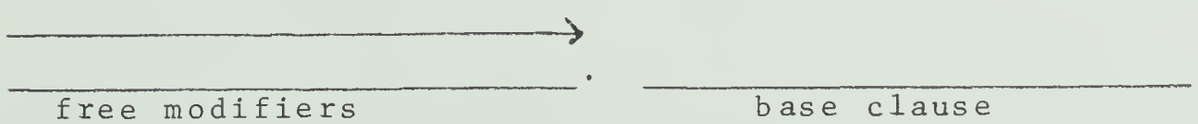
- Write sentence on B.B.

  With head lowered, nostrils flaring, and muscles bunched tight on his shoulders, the bull charged into the crowd. - Hemingway

Question

- What is the base clause in this sentence? (The bull ... crowd.)
- What are the free modifiers? (with head lowered; nostrils flaring; muscles ... shoulders;) Where are the modifiers placed, relative to the base clause? (At the beginning of the sentence.)
- Why does the writer use this method? (He creates tension in the reader. We must read on to find the object being described.)

* Notice that in this sentence the direction of movement is forward. We move towards the head word (bull) which is being described. We can illustrate the movement with an arrow.



free modifiers base clause

4. Help students develop one or two similar examples.

5. Let us examine a sentence in which the modification moves <u>forward and backward.</u>

   - Write sentence on B.B.

     There by the light of the flickering embers, they saw the little boy, pale, shivering, his teeth chattering, his arms encircling his knees, trying to keep warm.

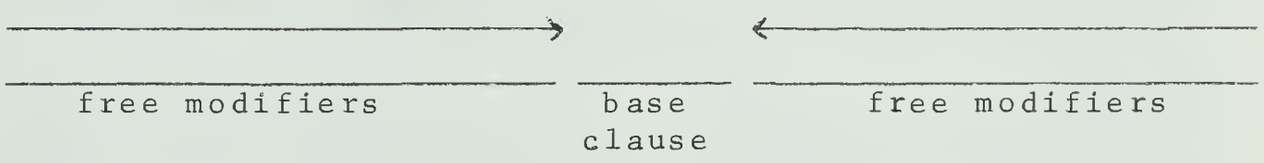
   <u>Question</u>

   - What is the base clause? (They saw the little boy.)

* Notice how generally the base clause is stated.

   - What are the free modifiers? Where are they placed? (at the beginning and at the end of the base clause.)

* The initial modifiers move the description <u>forward</u> to the base clause - the final modifiers go <u>backward</u> to the noun head (boy in the base clause.)



6. Develop a sentence or two similar to this one.

7. <u>Review</u>

   1. Free modifiers can be placed initially or finally.
   2. The final position is most common among mature writers. This style enables the writer to go over a general statement presented in the base clause and add any number of free modifiers to help him sharpen the image or the action.

LEVELS OF GENERALITY -- TWO-LEVEL SENTENCES

Objectives

1. To explain the characteristics and the function of the levels added to the main or base clause. e.g. Characteristics:
(1) added levels do not advance to a new block of time.
(b) added levels remain within the same block of time and go back over the action designated in general terms in the main clause. Functions: (a) added levels explore the action of the main clause at a lower level of generality.
(b) added levels make the idea more specific or more concrete.

2. To enable students to recognize when a writer has down shifted to a lower level of generality.

Introduction. Read to students:

In the previous lessons you have been introduced to the four major principles on which this writing course is based. (Write on B.B.) Addition, Direction of Movement, Levels of Generality. Today, we will examine more closely the principle called Levels of Generality. This is an important lesson because you will be required to recognize when a writer presents a general idea, and when he downshifts to a lower level of generality. When a writer goes down to a lower level of generality, he adds modifiers so that the general idea presented in the base clause becomes more specific. Let us examine a few sentences.

Procedures

1. Write the following sentence on the B.B.

She came in, her head bowed, her face hidden under her hat of dark green velvet. - D.H. Lawrence

Question

- What is the base clause in this sentence? (She came in,)

Write on B.B.

* Notice that the base clause is short and to the point. The person (she) is presented in general terms. There are no modifiers in the base clause. In fact, it tells us nothing about the pronoun she.

* With the base clause stated in this way, the forward movement of the sentence stops. Instead of saying something new, the writer shifts down to a lower level - in other words, the writer goes back to the pronoun she, and adds words, phrases, and clauses, - free modifiers to sharpen

the image of the person. Let us look at the sentence again.

What is the base clause? (she came in,). We designate this level one because it presents the major idea.

- What details has the writer added to the base clause?

1 She came in,
2 her head bowed,
2 her face hidden under her hat of dark green velvet.

* The first modifier adds a specific detail - it tells how she held her head. The second, modifier adds a further detail to the person. It tells us about the person's face.

The prepositional phrases also add details to sharpen the image of the person.

- Why do we designate the modifiers level two? (they are subordinate to the base clause. They are written at a lower level of generality. They describe the pronoun, she in the base clause.)

2. Let us examine another two-level sentence. (Write on B.B.)

1 She was half hunched at the back of the cage,
2 her legs tucked under her somewhere,
2 her weight on her stomach, and
2 her chin resting on her folded, hairy forearms.

Question

- What is the base clause (she ... cage,) What level should we designate it? (Level 1) What purpose does the base clause serve? (Presents the idea in a general way. This enables the writer to add any number of free modifiers.)

* Notice that all the base clauses we have seen are quite short. Each is a simple sentence with a subject and predicate. The verb in each base clause give us an idea of time - present or past.

- Is the action in this base clause complete? (Yes)

- Is the action fully described? (No, half-hunched is a general description of the action.)

- What does the writer do to make the action of hunching more vivid? (He has added details using free modifiers.)

- What are the free modifiers? (her legs ... somewhere, her weight ... stomach, her chin ... forearms.)

* Notice that the writer has added three specific details to the base clause. He concentrates on the action itself to get the details. Also observe: (a) the added details form a parallel series - that is they are the same kind of

modifiers describing the action in the base clause. (b) Because all the added modifiers are parallel, we designate them level two. If the writer goes to a lower level we will designate that level three.

3. Treat the following sentence in the same manner.

1 In the shade of the trees the birds were working,
2 scratching in the leaves,
2 flying a few feet and scratching again. - Steinbeck

4. Develop two sentences with the class. Remind students that the easiest way to get the appropriate modifier is to concentrate on the person or the action itself. Use this base clause.

a) 1 He screeched to a stop,
2 his tires _____,
2 the front of his car _____.

b) 1 She waited for him at the corner,
2 _____,
2 _____,
2_____.

Review

- the main clause presents the action or the object in a general way.

- the added free modifiers go over the base clause to explore it at a lower level of generality.

- the added modifiers are always more specific or more concrete. They add specific details to make the image or the action more vivid.

LEVELS OF GENERALITY - MULTI-LEVEL SENTENCES

Objectives

1. To demonstrate to students how mature writers make use of free modifiers to construct a cumulative sentence.
2. To help students recognize the various levels of generality as found in mature writing.

Introduction

- Read to students: In our last lesson we examined a number of two-level sentences. The base clause was designated level-one and the added free modifiers were designated level-two. Let us examine another two-level sentence as review. (Write on B.B.)

  She walked slowly, picking her way as though she would fall. --Steinbeck

- Question:What is the base clause? Designate level-one:
  1 She walked slowly.
- Emphasize the fact that the base clause is short and it presents the action in a general way.
- Question: What are the added modifiers? Designate level-two: 2 picking her way as though she would fall.
- Notice that the added modifier is subordinate to level-one. That is, it adds a detail to level 1.

* When the modifier adds a detail, a description or a comparison to a noun head or verb head in the base clause, the added modifier is designated level-two.

- Elicit from students examples of two-level sentences.
- Treat sentences as above.

Procedure

1. Now let us examine a few three-level sentences. (Write on B.B.)

   In a few minutes he came back, still wiping his face, as if there were cobwebs on it. - Robert Mathan

2. Question:

   What is the base clause? What level should it be designated? (write on B.B. and designate level-one.)

   - What is the other added modifier?

     As if there were cobwebs on it.

   - What does this group of words modify? It modifies the action presented in the second level. (still wiping his face.)

* When an added modifier adds a detail or description to a noun or verb head in level two, we designate this added level, level three.

1 In a few minutes he came back,
2 still wiping his face,
3 as if there were cobwebs on it.

3. Let us look at another three level sentence:

4. Write on B.B.

He could see the stallion rolling away before him down the slope, its long and heavy tail and mane streaming, their flow giving shape to the invisible wind. W.V.T. Clark

Question

- What is the base clause? The level?
- List the added modifiers. What levels would you designate them?

1 He could see the stallion rolling away before him down the slope,
2 its long and heavy tail and mane streaming,
3 their flow giving shape to the invisible wind.

* Let us examine the modifiers in some detail.

- The base clause presents an action in a general way.
- To make the action more specific, the writer shifts down to a lower level of generality and adds particular details. He concentrates on the experience itself for the details.
- The added modifier "its long and ... streaming," is subordinate to the base clause. That is, it adds to a noun head or verb head in the base clause. We therefore designate this modifier level two.
- There is another added modifier: "their flow ... wind."

* Notice that this modifier adds not to anything in the first level but rather to the nouns tail and mane in the second level. This modifier is subordinate to the second-level modifier. This is why we designate it level three.

5. Now let us construct some three-level sentences of our own.
   - Here is a base clause. The hungry soldiers ate greedily, (wolfing down their food), (their gravy oozing from their mouths). Add a second level modifier to the base clause. Then add a third level modifier.
   - Do an entire three-level on your own.

LESSON - TEXTURE

Objectives:

1. To demonstrate to students that the main clause of a sentence serves as a base for additions that carry most of the weight of the sentence (e.g. "the meaning is in the modifiers").
2. To illustrate what is meant by texture.

Procedures:

1. Present mimeographed passage (numbered 1) with all additions removed, to students.
2. Discuss paragraph with students emphasizing the following points:
   a) there are ten sentences in the paragraph, all main clauses.
   b) the paragraph is a summary of an action - the main clauses enable us to follow the action but we do not enter into it imaginatively.
   c) the writer has not used any modification.
3. Present paragraph (numbered 2) to class.
   a) Note the difference between paragraph 1 and paragraph 2. e.g. paragraph 2 contains a number of additions.
   b) Elicit from students the additions made to the paragraph.
   c) Underline additions. Note that these are to a large extent one-word modifiers.
4. Present paragraph (numbered 3) to class.
   a) Discuss paragraph with students noting particularly the difference in the kind of additions made.
   b) Elicit additions from students and underline them.
   c) Introduce the term texture. Point out that paragraph 1 is a bare style with a thin texture; and that paragraph 2 is a rich mature style with a dense texture.
   d) Emphasize that the purpose of these lessons is to help students develop a mature style with a dense texture.
   e) Discuss how the writer achieves a dense texture, e.g. Through the addition of phrasal and clausal modifiers.
   f) Point out that the number of elements added to a single sentence varies. There is no limit to the number that can be added.

5. Place the following base clause on the blackboard:

   The hamburgers came, _____
   _____

   a) Ask students to imagine being in a small cafe along the highway having lunch. Hamburgers are ordered. Now, using the base clause, describe the hamburgers. Use as many additions as you wish. e.g. The hamburgers came, charred to a crisp, covered with brown gravy to hide the chef's poor cooking.

   b) Encourage students to make additions. Write on blackboard.

6. Develop two more sentences with the students.

THE NOUN PHRASE

Objectives

1. To enable students to recognize the noun phrase as a free modifier.
2. To assist students in using the noun phrase as a free modifier in their own writing.

Introduction

Read to students: In our lessons on the levels of generality, we mentioned that the main or base clause of a sentence is likely to be stated in abstract or general terms. With the statement of the main idea completed, forward movement stops. The writer goes over the same ground at a lower level of generality, adding specific details or descriptions. Today, we will examine ways in which writers use the noun phrase as free modifiers to add specific details and descriptions.

Procedures

1. Write the following sentence on the B.B.

   1 The lighter's flames lighted up his features for an instant,
   2 the packed rosy jowl,
   2 the graying temple under Tyrolean hat's brim,
   2 the bulging, blue, glazed eye. - Boyle

2. Ask student to read the sentence.

3. Question

   a) What is the base clause? Call attention to the fact that the base clause focuses on the word features, a very general term. The writer goes back over the base clause and adds a series of particulars which allow us to observe the features.

   b) What are the added levels? (the packed rosy jowl, the graying temple, the bulging, blue, glazed eye.)

   c) What is the specific feature on which the author focuses at each level? jowl, temple, eye.

* Notice: 1. that the head word of each second level addition is a noun. (jowl, temple, eye.)
2. each of these nouns is a particular aspect of the word features.

3. All other words, and constructions in the second level modify these particulars. e.g. packed, rosy, jowl,; the graying temple; the bulging, blue, glazed eye.

4. The noun phrase can be of any length - it can be one word long, the noun itself.

The noun phrase can have any number of modifying elements.

* It is still a noun phrase if the head word is a noun.

5. Let us examine another sentence containing a noun phrase as a free modifier.

6. Write sentence on B.B.

1 He saw the fire-light leaping in the window of the sitting room,
2 a leaping light in the little cluster of dark buildings.
-D.H. Lawrence

7. Question:

- What is the base clause in this sentence?
- On what word does the author focus attention? (firelight)
- What is the added modifier? At what level is it added? (second)
- What is the head word of the second level modifier? (light.)
- What specific detail is added to the noun head? (a leaping light.)

* Notice that the author has also added prepositional phrases. These simply add details to the noun light.

* Remember: (1) The base clause presents an action or image in a general way.
(2) The free modifiers add specific details or description to sharpen the picture of the image or the action.
(3) If the added free modifier has a noun head word, it is a noun phrase.

8. Now let us develop a sentence together. I will give you the base clause and the head-words. You add the modifiers. Write on B.B.

1 The waiting room was crowded with luggage,
2 _____ (adjective), _____ (adjective), trunks, and
2 _____ (adjective), _____ suit cases.

- We want to get specific details about the word luggage which is too general. So we have noun head words which specify the luggage (trunks, suit cases.)
- You may add adjectives to the noun heads.

* Allow students to contribute adjectives.

9. Let us try another one:
   - Write on B.B.

     1 Janice enjoyed her summer at college,
     2_____ _____,
     2_____ _____,
     2_____ _____.

   - We want to make the word college more specific. What particular things about college life can we use as noun heads? (courses, dormitory, dates, etc.)
   - What adjectives can you use to describe each noun head? (the interesting courses, the exciting evenings in the fashionable dormitory, the memorable dates with handsome seniors, etc.)
   - Allow students to construct complete sentences with free noun phrase modifiers.

THE VERB PHRASE

Objectives

1. To demonstrate to the students how mature writers use the verb phrase to enrich the texture of their sentences.
2. To help students recognize the verb phrase as a free modifier.
3. To help students use the verb phrase as a free modifier in their own writing.

Introduction

Read to students: We have discussed how we can enrich the texture of our sentences by:

1. Expanding the noun phrase, adding before the noun head any number of adjectives, and by
2. adding after the noun head, prepositional phrases.

The noun phrase and the prepositional phrase both depend on the noun. Today we will study the structures that focus attention on the verb. The most important of these structures is the verb phrase.

Procedures

1. Place the following sentence on the B.B.

   Kip was standing in the doorway, peering into the darkness. -Sheila Watson

2. Question

   - What is the base clause? What level must we designate it? (Level one)
   - What is the added modifier? (peering ... darkness).
   - What level must we designate it? (Level two).
   - What is the head word of the modifier? (peering).

3. Explain to students. The head word for the added modifier is a verb head. A verb head can be used as a bound modifier. e.g. The man peering in the window looks suspicious.

   The word peering is a bound modifier and it limits our description. We are not concerned with the bound modifier. We will try to use the verb phrase as a free modifier as in this sentence.

1 I saw that she was bare footed,
2 standing with her feet flat and easy on the floor.
- Faulkner

4a. Place the following sentence on the B.B.

The gulls came out to meet them and circled above screaming furiously.

They were pumping their stiff mechanical wings.

They were turning their wooden heads as if on hinges to eye the scene severely.

They were falling like stones on the waves.

They were snatching at lumps of galley refuse.

b. Discuss the above sentences with students:

Do you feel that the writer has pictured the action of the gulls successfully? (Yes - general to specific)

How would you describe the style of writing? (choppy - what we have is a series of disconnected actions, unlike the smooth flight of the gulls.)

5. Let us look at how K.A. Porter actually wrote the sentence. Place on B.B. this sentence:

1 The gulls came out to meet them and circled about screaming furiously,
2 pumping their still mechanical wings,
2 turning their wooden heads as if on hinges to eye the scene severely,
2 falling like stones on the waves,
2 snatching at lumps of galley refuse. -K.A. Porter

* Notice how smoothly the sentence flows. With the base clause stated, Porter adds four second level modifiers to sharpen the picture of the gulls' flight. Each free modifier is a verb phrase with a present participle (verbs ending in ing) as the head word. (e.g. pumping, turning, falling, snatching.)
Each added level tells us how or the manner in which the gulls fly.

6. Let us examine a sentence written by W.V.T. Clark. Place the following sentence on B.B.

1 He (the hawk) could sail for hours,
2 searching the blanched grasses below him with his telescopic eye,
2 gaining height against the wind,
2 descending in mile-long gently curving swoops,
2 never beating a wing. - W.V.T. Clark

* Notice the brief and general way in which the base clause is stated. The author adds four second level free modifiers which are subordinate to the base clause. Each free modifier is a verb phrase with a present participle as the head word.

7. Let us look at another kind of verb phrase, this one making use of a past participle as the verb head. (You may call attention to the past participle forms. e.g. see saw seen; dash dashed dashed; write wrote written; etc.)

8. Place the following sentence on the B.B.

   The man, disturbed by the explosion, dashed outside.

Question

What is the main idea expressed in this sentence? (The man dashed outside.)

What word or group of words modify the noun man? (disturbed by the explosion).

* Notice that this is a bound modifier. It is not set off from the base clause. Bound modifiers restrict us too much. We must concentrate on the free modifier.

* How can we arrange the sentence so as to make the modifier a free modifier? (Reconstruct the sentence so that the modifier is set off from the base clause. e.g. The man dashed outside, disturbed by the noise.)

* Notice that the free modifier is now set off by the use of punctuation (,). The free modifier can be placed at the beginning of the sentence.

- What is the head word of the free modifier? (disturbed)

* Notice that the participle is a form of the verb. We therefore call the modifier a verb phrase: To be more specific it is a verb phrase with a past participle as the verb head.

9. Let us examine another sentence with a past participle as the head word of the verb phrase. (Write the sentence on B.B.)

   1 The weary animals struggled up the hill,
   2 driven by the storm,
   2 beaten by the rain.

Question

What is the base clause? (The ... hill) (it presents a picture in a general way.)
What are the free modifiers? What level should they be designated? (level 2). Why? (Because they are subordinate to level one and they add description to the base clause.)

What is the head word in the first modifier? (driven)

What kind of head word is <u>driven?</u> (Participle).

* Notice that the verb phrase used as a free modifier adds descriptive details to the base clause. In other words, the free modifiers give you unlimited choice for description.

10. Examine the following sentences in the same manner.

a. 1 He battled against the current,
2 pulling heavily on the oars,
2 guiding the canoe this way and that,
2 avoiding the eddies and falls.

b. 1 He drove up quickly to the curb,
2 switched off the engine, and
2 darted swiftly into the dark alley.

11. Now let us develop a sentence which contains a verb phrase (present participle) - as the head word.

a. Write the base clause on the B.B.

1 The old jalopy rattled down the country road,
2_____,
verb phrase - pres.part. as head word.
2_____
verb phrase - pres. part. as head word

In order to supply the verb phrase modifiers, let us concentrate on how the car went down the country road. What are some verbs we can use to show the manner in which the car went? (e.g. <u>bumping</u> over ruts; <u>swerving</u> this way and that; sputtering up the hill; etc.) Elicit as many modifiers from the students as possible.

b. Work out one more example using the past participle as the head word of the free modifier.

1 Jason slammed the door shut,
2_____,
verb phrase - past. participle as head word
2_____
verb phrase - past. part. as head word

VERB PHRASE - REVIEW LESSON

Objectives

1. To review with the students the use of the verb phrase as a free modifier.
2. To help students recognize the present participle and past participle forms as head words for the verb phrase used as a free modifier.
3. To encourage students to use the verb phrase as a free modifier.

Introduction (15-20 minutes)

a. At this time, the assignment on the paragraph should be discussed. Have individual students read their paragraphs to the class. Comment on free modifier structures that students have used. You may give them a few minutes to complete their paragraphs.

b. A few minutes should be spent on problems students are experiencing with the free modifiers.

Review

Verb Phrase.

1. Let us examine a few more sentences with verb phrase modifiers.

Question

What part of speech is usually the head word for the verb phrase? (verb - present participle, and past participle.)

2. Write the following sentence on the B.B.

1 She trudged along the deserted street,
2 limping a little,
2 clutching her cane for support,
2 looking over her shoulder as if she were afraid.

Question

What is the base clause in this sentence?

What are the free modifiers? What are the head words? (limping; clutching; looking.) What part of speech? (present participle).

* It is important to observe that so far we have not put anything before the verb head. The verb heads limping, clutching, looking, come at the beginning of each verb phrase. We can add a detail before the verb head if we so desire. e.g. her right hand clutching her cane for support. We can do this to make the picture more precise. In our next lesson we will concentrate on this.

Also observe that the last free modifier has a clause which adds a further detail. The point is, the free verb phrase modifier will give you an unlimited number of choices for expressing an idea.

3. Now let us develop a sentence together.

1 The quarter-back danced down the sideline,
2 _____ _____,
verb phrase - pres. part. prep. phrase - detail
2 _____ _____
verb phrase - pre. part. prep. phrase - comparison

Elicit as many modifiers as possible. Discuss them for appropriateness, etc.

e.g. 2 holding the ball (pres. part.) with both hands, (prep. phrases-detail)

2 twisting and turning (pres. part.) like a ballet dancer. (prep. phrase-comparison)

4. As an assignment you may ask students to revise their paragraphs and hand them in. You may also encourage them to read and study the sentences on the attached sheets. You may ask students to bring in examples of sentences with free modifiers.

THE PREPOSITIONAL PHRASE

Objectives

1. To demonstrate to students how writers use the prepositional phrase as a free modifier.
2. To help students use this kind of free modifier in their own writing.

Introduction

Read to students: In the lesson on "Noun Phrase" we saw that modifiers can be added to noun heads to provide a rich texture. In the sentences we examined, all the modifiers were added before the noun head. For example, in this sentence: (place on B.B.)

1 Mrs. Halloram's voice was going on in the hall,
2 a steady dry sound. - K.A. Porter

In this sentence, the base clause presents no details about the voice. To sharpen the sounds of the voice, the author adds a second level modifier. In this modifier the head word is a noun. (sound.). Before this noun are placed two word-modifiers. The important lesson for us is that we can place modifiers after the noun head as well. And this is exactly what K.A. Porter has done in her original sentence.

Procedures

1. Let us examine Porter's original sentence;

2. Place on B.B.

1 Mrs. Halloran's voice was going on in the hall,
2 a steady dry sound like old newspapers blowing on a park bench.

3. This is the sentence Porter actually wrote.

To add further description to the noun head, Porter uses the preposition like. The preposition like and what follows constitute a prepositional phrase. She uses it to make a comparison.

4. The prepositional phrase is normally a modifier - a modifier of the word or construction the preposition relates its object to. In this case, the prepositional phrase relates to the noun sound.

5. Review quickly the uses of the prepositional phrases.

   a. comparison - The fat man waddled across the street like a duck.
   b. place - The student sat around the campfire.
   c. time - In the morning the forest is alive with birds.

6. We will not concentrate on these uses because you already know them. We will concentrate on the prepositional phrase used to provide descriptive details.

7. Write on B.B.

   1 The forward guy wire of our mast began to sing under the wind.
   2 a deep and yet penetrating tone like the lowest string of an incredible bullfiddle.

8. Question

   What is the base clause?
   On what word does the author focus attention in the base clause? (Sing)
   What is the free modifier? What is the head word in the modifier? (tone).
   What adjectives are added before the noun head? (deep, penetrating)

* Notice that the author has added a comparison to the noun head, tone, What is this comparison? (like the ... bullfiddle.)

   This is an example of how we can use the prepositional phrase to add comparisons. The prepositional phrase is added after the noun head.

9. Discuss the following sentences in the same manner.

   1 The lightening licked across the sky.
   2 a hot pink color like an unbridled display of passion.

   1 He grinned at her,
   2 a toothy grin like a hyena.

10. Now let us develop a sentence together: (Place on B.B.)

   1 The old man stood under the tree,
   2 _____ adj., _____ adj., figure _____

   _____
   prep. phrase. comparison

   Encourage students to supply modifiers.
   e.g. a dejected, lonely figure with a little dog cradled in his arms.

11. Let us examine a sentence in which the prepositional phrase is used to add details. (Place on B.B.)

1 He was snoring softly,
2 a buzzing sound with a little bubbling at the lips.

Question

What is the base clause? On what word does the author focus attention? (snoring)

What is the added modifier? What is the head word in the added modifier? (sound)

* Notice that a bound modifier comes before the noun head.

But the author has also added a further detail by adding a prepositional phrase after the noun head.

What is the prepositional phrase? (with ... the lips.)

12. Discuss the following sentences in the same manner.

a. 1 I heard the insects rustling in the closet,
2 sharp noises mingled with the harsh sound of a fan opening.

b. 1 Al was out already,
2 unscrewing the steaming radiator cap with the tips of his fingers ....

THE ABSOLUTE PHRASE

Objectives

1. To demonstrate to students how mature writers use the absolute phrase as a free modifier.
2. To help students recognize the absolute phrase as a syntactic structure.
3. To help students use the absolute phrase as a free modifier in their own writing.

Introduction

Read to students: In our last lessons we examined the ways in which mature writers use verb phrases as free modifiers. We saw that the verb phrase has as its head word a participle (present, or past), and that the added verb phrase was subordinate to the base clause. Let us examine such a structure briefly. (Write on B.B.).

1 She swept up the cards .....,
2 standing them on end,
2 fanning them out,
2 whirling them through her fingers,
2 dancing them up her arms,
2 cracking the whip over them. - J.F. Powers

* Notice that the base clause is short and it is presented in a general way. To sharpen the image the author adds details to the base clause by using verb phrases as free modifiers.

* Now let us look at the verb phrase modifiers. What are the head words? (fanning, whirling, dancing, cracking.)

Observe carefully that no other words are placed <u>before</u> the verb heads. (Examine all to satisfy students).

* Today we will see how mature writers change the ordinary very phrase modifier to an <u>absolute phrase modifier</u>.

Procedures

1. Write the following sentence on the B.B.

She picked up the cards. Her left hand was standing them on end. Her right hand was fanning them out.

Have student read the sentence.

The single short sentences result in a choppy style.

The problem is to combine the sentences into a single sentence, compact, well constructed.

2. Write the base clause on B.B. and designate level one.

She picked up the cards,

3. Now let us change the remaining two simple sentences to free modifiers. How would you change them?

* We can say: standing them on end. Here we have a verb phrase with the verb as a head word.

We can also say: standing them on end, Here we have a verb phrase with the verb as a head word.

We can also say: her left hand standing them on end.

* Notice that in this construction we have added a subject, her left hand, to the verb phrase. Also observe -- we have deleted the auxiliary verb was.

4. Let us change the second simple sentence to a free modifier. How would you do it?

* We can say: fanning them out. Here we have a verb phrase modifier with the verb as a head word.

* We can also say: her right hand fanning them out.

* In this construction we have added a subject to the verb phrase, and we have deleted the auxiliary verb.

* Notice that the actions of standing and fanning are not performed by the subject of the base clause. They are performed by the subjects of the added levels.

* e.g. her left hand; her right hand.

* Such constructions are called Absolutes. They are not grammatically related to the base clause. The absolute consists of two parts: subject and predicate. (The predicate is a verbal and its complements.)

* The important fact for us to remember is that the absolute phrase permits the writer to deal, at a lower level of generality, with aspects of an image or an action presented in the base clause.

5. Let us examine another sentence containing an absolute phrase modifier. (Write sentence on B.B.)

1 He passes us swiftly without looking at us,
2 the horse driving,
2 its hooves hissing in the mud. - Faulkner

Question

What is the base clause in this sentence?
What is the first added modifier? (the horse driving,)

* Notice that the phrase has a subject and a predicate. What is the subject? (the horse) What is the predicate? (driving)

What kind of phrase is it. (Absolute)

What is the second modifier? (its hooves ... mud.)

What is the subject? (Its hooves) What is the predicate (hissing in the mid).

* Emphasize the fact that the absolute phrase is a free modifier and it gives the writer another choice in expressing himself.

6. Many writers use a variety of modifiers in a single sentence, including the absolute phrase.

Let us examine such a sentence.

Write the following sentence on the B.B.

1 Six boys came over the hill ....,
2 running hard,
3 their heads down,
3 their forearms working,
3 their breath whistling. - Steinbeck

What is the base clause? (six .... hill ....,)

What is the first added modifier? (running hard)

What is the head word for this modifier? (running)

What kind of modifier is it? (verb phrase)

What level is it designated? (level 2) Why? (It is subordinate to the base clause.)

What are the other modifiers? (their heads down; their forearms working; their breath whistling.)

What kind of modifiers are these? (Absolute)

Notice that the absolute phrases allow the author to add details at a lower level of generality -- that is, the details are more specific than those of the second level.

e.g. - Level 1 simply says that the boys came over the hill.

In level 2, the free modifier tells how they came.

In level 3, the free modifiers become more specific and describe the boys' heads, forearms, and breath.

8. Let us develop a sentence with a variety of free modifiers. Here is the base clause.

1 The model moved on to the stage,
2 _____,
verb phrase - pres. participle

3_____
absolute phrase

* Tell students that the secret is to concentrate on the model herself. e.g. How did she come on to the stage? (smiling a little? bending forward? etc.) What does she do with her hands? Her head? Her legs? (her hands at her side? her head up? etc.)

9. Work out another sentence, allowing students to supply the base clause and all the modifiers.

A P P E N D I X C

Supplementary Material to Accompany Units of Work on the Rhetoric of the Sentence (Samples)

DIRECTION OF MODIFICATION

Initial Modifiers:

1. In the front room, his nails brown from the developer, his face pear-shaped, pear-colored, bearing the great bone of nose he had not yet grown to, the kid watched the water dropping into the tank. - P.K. Page

2. Sinister, impressive, his wide sombrero pulled tight down upon his eyebrows, he marched first through the door. - Conrad

3. Tall and ragged, with white thin beard and clerical hat, there was the strange dignity inseparable from blindness in his erect figure. - Coppard.

Medial Modifiers:

1. Then a figure by the rail, tall, head up in the shadows, comes forward. - Conrad

2. His eyes, dark brown and quick-shifting, were dissolute. - Lawrence.

3. The old major, tall and fantastically ragged, like a scarecrow, walked round the body of the late Senor Hirsch. - Conrad

Initial and Final Modifiers:

1. There by the light of a coal-oil lamp, they saw the woman, sitting at the stove, pale, shivering, her teeth achatter, trying to warm her hands, which were cold with fever, and looking with lack-lustre eyes at the men as they entered. -- F.P. Grove

2. Fear-stricken, the dog turned and flurried, like an animal in a pen. - Crane

3. At the wall, the two children were playing with the others, scrambling up and along the wall and down in a complicated kind of obstacle race. - Christopher

Final Modifiers:

1. students must learn that writing means recording one's own observations, pinning down one's reactions, interpreting one's own experience, formulating one's own judgments, questioning one's own premises, and making one's own mistakes. - H.P. Guth

2. The horse was still there, still excited, snorting at the light and shadows from the lantern, its eyes wild, its nostrils dilated. - F.P. Grove

3. He sits lightly, poised, upright, wooden faced in the saddle, the broken hat raked at a swaggering angle. - Faulkner

FREE VERB CLUSTERS

1. They looked dumb with humiliation, pleading with a kind of captive misery. - Lawrence

2. And at last he moved up the road, shooting the dust ahead of him, making a cloud that hung low to the ground behind him. - Steinbeck

3. The face of an old priest was at the grating, averted from him, leaning upon a hand. - Joyce

FREE NOUN PHRASES

1. Halfway there, he heard the sound he dreaded, the hollow rasping cough of a horse. - Steinbeck

2. The dog began to howl, the high, steady howl of deadly hurt. - A.B. Guthrie

3. The waiting-room was the hall, a long, bare room paved with blue brick. - Lawrence

FREE ADJECTIVE CLUSTERS

1. The red eyes looked at his face, calm, fearless, and fierce. - Steinbeck

2. The air was warm, thick, heavy, sluggish. - Conrad

3. He screamed with uplifted eyebrows and a wide open mouth -- incredibly wide, black, enormous, full of teeth -- comical. - Conrad

ABSOLUTE PHRASES

1. He looked older than he was, his face being heavily lined and sallow and his hair streaked with gray, with one white patch, like ash, sore and itchy. - W.V.T. Clark

2. The wagon stands on the square, hitched, the mules motionless, the reins wrapped about the seat spring, the back of the wagon turned toward the court house. - Faulkner

3. Then, often very late indeed, she came in, with her long stride, her head bowed, her face hidden under her hat of dark green velvet. - Lawrence

STUDY SENTENCES

1. He put his hand to his side and coughed twice, a cough metallic, hollow, and tremendously loud. - Conrad

2. The farm buildings huddled like little clinging aphids on the mountain skirts, crouched low to the ground as though the wind might blow them into the sea. - Steinbeck

3. He stood quivering, and the doctor, perched on the edge of the table, facing thoughtfully the cruel and lamentable night, his chin in his hand, muttering without stirring:
- Conrad

TWO - LEVEL SENTENCES

1. 1 Al was out already,
   2 unscrewing the steaming radiator cap with the tips of his fingers,
   2 jerking his hand away to escape the spurt when the cap should come loose. - Steinbeck

2. 1 It was hard to keep my eyes open,
   2 staring at the road,
   2 watching the black blades sweep rhythmically across the windshield,
   2 seeing the white flakes rushing toward me and then, inches away, soundlessly flattening against the glass.
- MJE

3. 1 He stood brushing his hand over his smooth gray hair,
   2 as if he were trying to clear away a fog about his head. - Cather

THREE - LEVEL SENTENCES

1. 1 The assistant manager fussed over him,
   2 wiping a cut on his leg with alcohol and iodine,
   3 the little stings making him realize suddenly how fresh and whole and solid his body felt. - Irwin Shaw

2. 1 Evans laid the yoke on one of his oxen and pinned the bow and spoke to the teammate,
2 holding the yoke up while the second animal stepped into place,
3 its ankles creaking. - J.B. Guthrie

3. 1 He could see the stallion rolling away before him down the slope,
2 its long and heavy tail and mane streaming,
3 their flow giving shape to the invisible wind.
- W.V.T. Clark

TEXTURE

1. The sky was changing now: it was coming on to storm, or I didn't know signs. Before it had been mostly sunlight. Now it was mostly shadow. And the wind was down to earth and continual. The smoke from houses where supper had been started was lining out to the east and flawing down. It was a wind like comes before snow. Out at the end of the street, the look of the mountains had changed too. Before they had been big and shining. Now they were dark and crouched down, and it was the clouds that did matter. And they weren't spring clouds, or the kind that meant a rain, but thick, shapeless and white.

2. The sky was <u>really</u> changing now, <u>fast</u>; it was coming on to storm, or I didn't know signs. Before it had been mostly sunlight. Now it was mostly shadow. And the wind was down to earth and continual. The smoke from houses where supper had been started was lining <u>straight</u> out to the east and flawing down, <u>not up</u>. It was a <u>heavy</u> wind like comes before snow. Out at the end of the street, the look of the mountains had changed too. Before they had been big and shining. Now they were dark and crouched down, and it was the clouds that did matter. And they weren't <u>firm</u>, spring clouds, or the <u>deep</u>, <u>blue-black</u> kind that meant a <u>quick</u>, <u>hard</u> rain, but thick, shapeless and gray-<u>white</u>.

3. The sky was really changing now, fast; it was coming on to storm, or I didn't know signs. Before it had been mostly sunlight, <u>with only a few shadows moving across fast in a wind that didn't get to the ground</u>, <u>and looking like burnt patches on the eastern hills where there was little snow</u>. Now it was mostly shadow, <u>with just gleams of sunlight breaking through and shining for a moment on all the men and horses in the street, making the guns and metal parts on the harness wink and lighting up the big sign on Davies' store and the sagging, white veranda of the inn</u>. And the wind was down to earth and continual, <u>flapping the men's garments and blowing out the horses' tails like plumes</u>. The smoke from houses where supper had been

started was lining straight out to the east and flowing down, not up. It was a heavy wind with a damp, chill feel to it, like comes before snow, and strong enough so it wuthered under the arcade and sometimes whistled, the kind of wind that even now makes me think of Nevada quicker than anything else I know. Out at the end of the street, where it merged into the road to the pass, the look of the mountains had changed too. Before they had been big and shining, so you didn't notice the clouds much. Now they were dark and crouched down, looking heavier and not nearly so high, and it was the clouds that did matter, coming up so thick and high you had to look at them instead of the mountains. And they weren't firm, spring clouds, with shapes, or the deep, blue-black kind that mean a quick, hard rain, but thick, shapeless, and gray-white, like dense steam, shifting so rapidly and with so little outline that you more felt than saw them changing. -- Walter Van Tilburg Clark, The Ox-Bow Incident

The difference between the first version, which is a bare style with a thin texture, and the third, which is a rich, mature style with a dense texture, lies primarily in the addition of phrasal and clausal modifiers. In this unit you will learn how to make such additions to your writing.

(PARAGRAPHS WITH NOUN CLUSTERS (APPOSITIVES)

A. Drinking his morning coffee, he listened to the early noises: the chink of milk bottles on the doorstep and the milkman's heels scraping on the asphalt parking lot; a motor-bike sput-putting in the driveway; the whir and whiz of a telephone dial in the next apartment; the paper plopping underneath the window and the reverberating snore of a sand-blaster already at work. - MR

B. The heavy door creaked just a little as she opened it and entered the church dim and quiet now in the late afternoon, the air cool and damp, bringing with it all the remembered odors: the sharp clean smell of waxed linoleum; the acrid penetration of smoking wax, and, so faint as to almost escape notice, the sweet, heavy pungency of incense from the morning's Benediction -- good smells, all, and comforting. - MJE

NARRATIVE PARAGRAPHS

A. He turns the switch on and, with an almost silent whir, the shiny, razor-toothed blade of the buzz saw whirls with rapidly increasing momentum, the breeze from its motion fanning away the pine sawdust left from the last cutting. As the blade bites into the strip of rust-colored mahogany, twin streams of fragrant sawdust fly from each side like the snow from a plow cutting a path through a mountain pass. The keen blade bites ever deeper, the twanging buzz mounting to a scream. With a wail of protest, motor laboring, the blade meets a knot and stalls momentarily. Then, recovering its momentum, it screams through the remainder of the board. - GS.

A P P E N D I X D

Assignments on the Rhetoric of the Sentence

Assignment. Principle of Addition

1. In this exercise you are asked to draw a single line under the base clauses and a double line under the free modifiers.

(a) The horse is trembling, its eyes rolling wild and baby blue in its long pink face. -- Faulkner

(b) A thick furred yellow shepherd dog came trotting down the road, head low, tongue lolling and dripping. -- Steinbeck

(c) And at last he moved up the road, shooting the dust ahead of him, making a cloud that hung low to the ground behind him. -- Steinbeck

2. In this exercise you are asked to write sentences containing the same number and kind of free modifiers as found in the example sentences. The base clauses are provided - simply add the free modifiers to complete the picture presented in the base clause.

Example:

Kip was standing in the doorway, peering into the room. -- Sheila Watson

Matt stood on the stage, wiping the beads of perspiration from his forehead.

(a) Example Sentence:

The red eyes looked into his face, calm and fearless, and fierce.

Problem Sentence.

She danced across the stage, _____, and_____, and _____.

(b) Example Sentence:

Halfway there, he heard the sound he dreaded, the hollow rasping cough of a horse. -- Steinbeck.

Problem Sentence.

I heard the voice in the hallway,_____

_____

(c) Example Sentence:

He raises his hand to his head, scouring his hair, listening to the saw. -- Faulkner

Problem Sentence:

She swished into the room,_____
_____, _____

(d) Example Sentence:

He put his hand to his side and coughed twice, a cough metallic, hollow, and tremendously loud.

Problem Sentence:

The lion roared in defiance,_____
_____,_____,_____

Direction of Modification

Assignment:

1. In This exercise you are asked to supply all the free modifiers required to sharpen the image or the action presented in the base clause. The base clause is provided for you. Remember -- you must concentrate on the object or the action.

a. _____
free modifiers
the animals grazed peacefully.

b. The grown bears ambled across the highway,_____
_____

c. _____, she marched through
free modifier
the door, _____
free modifiers

d. He laughed loudly,_____
free modifiers
_____, _____
free modifiers free modifiers

2. In this exercise you are asked to construct your own sentences providing the direction of modification called for. Remember your base clause must be general.

a. _____, _____,
base clause free modifier
_____

b. _____, _____,
free modifier base clause
_____

c. _____
free modifiers
_____.
base clause

d. _____, _____,
base clause free modifier
_____,
free modifiers
_____.
free modifiers

Assignment. Levels of Generality - Two-level Sentences

1. Rewrite the following sentences to indicate the various levels of generality. Use 1 to indicate the base clause and 2 to indicate the lower levels of generality. Here is an example:

Example: He came up the hill, puffing from the long climb, limping a little, gulping air into his tired body.

1 He came up the hill,
2 puffing from the long climb,
2 limping a little,
2 gulping air into his tired body.

a. He leaned against the building, standing on one leg, pulling idly at his right ear, looking up now and again at the passers by.

1 _____,
2 _____,
2 _____,
2 _____.

b. The life guard came out of the pool, his hair wet and straggly, his muscles rippling as he dried himself.

_____

c. She acted beautifully, singing to the audience, dancing to the melody of the band, enjoying the applause.

_____

d. He was seventeen, coarse featured, fleshy, and thick-jowled.

_____

2. In this exercise you are asked to add as many free modifiers as you wish to the base clause. Be sure that the added modifiers are stated in a parallel way.

a. 1 He was a little man,
2 _____,
free modifier
2 _____.
free modifier

b. 1 She walked down the street,
2 _____,
2 _____.

c. 1 The night was dark and stormy,
2 _____,
2 _____.

Assignment. Multilevel Sentences

1. Rewrite the following sentences to indicate the various levels of generality, indenting where necessary.

a. He moved slowly and deliberately, like a man with his mind made up. -- W.V.T. Clark

---

b. He walked with his head thrust forward, so that his shoulders seemed raised and rounded, as if he had a slight curvature of the spine. -- D.H. Lawrence

---

c. The rug came back down stream, the water shearing in long rolling cylinders, rocking the float at last with the echo of passage .... - Faulkner

---

2. This exercise is based on the levels of Generality, the free modifiers have been changed to full sentences. You are asked to restore the sentences to their original form as in the examples. They must be combined to form a single sentence.

Example:

Problem Sentence:

They said little as they passed along the road. The trees dripped on either side of them. A few yellowed leaves fluttered to the ground beaten by the wind and the rain.

Restored Sentence:

They said little as they passed along the road, trees dripping (or dripped) on either side of them, few yellowed leaves fluttering (or fluttered) to the ground beaten by the wind and the rain.

a. He had ten yards in the clear and picked up speed. He breathed easily. He felt his thigh pads rising and falling against his legs. His listened to the sound of cleats behind him.

---

b. He came out at once. His hair was wet and straggly. His feet were bare. He was wearing the yellow silk dressing gown. His hands were thrust deep into his pockets.

---

c. She greeted Matt. She smiled. She smiled the way girls do in illustrations.

---

d. The boy stood at the corner with one leg raised. He waited for the cars to go by. He stood as though he were waiting to begin a race.

_____

4. In this exercise you are asked to use the base clause to construct your own sentences. To sharpen the picture of the person or the action add the free modifiers at the levels indicated. Try to draw on your own experience and observation for the words you use.

a. 1 He was snoring softly,
   2 _____.
   3 _____.

b. 1 She was beautiful,
   2 _____.
   3 _____.

c. 1 He climbed up the wall carefully,
   2 _____.
   3 _____.

Assignment - Texture

1. You are given sentences containing modifiers. Read the sentence carefully, then construct a sentence using the same number and kind of elements.

   Example: The children savoured the cubes, smacking their lips, and looking up for more.

   The old man climbed the hill, puffing heavily, and resting for the climb down.

(1) a. The boysate greedily, trying not to be seen, the ketchup oozing through their fingers, the soda pop trickling down the corners of their mouths.

   b. The sailor walked to the boat_____,
   _____, _____.

(2) a. Matt threw an outside fake on the cornerback and speeded away, dancing down the side line, twisting, falling into the end zone.

   b. Tom looked down the field and caught the pass,
   _____, _____, _____.

2. You are given the following base clauses. Complete each sentence by making as many additions as you feel necessary to make the action or the object vivid. (e.g.1. How did Bill look when he got to the top of the hill? 2. How did Jane stand - her arms, her legs, her head? 3. What was she doing as she walked - talking? holding hands?)

(1) Bill climbed to the top of the hill,_____
_____

(2) Jane stood there waiting for him,_____
_____

(3) She walked beside him down the path,_____
_____

3. Study your sentences and paragraphs in the attached sheets, paying attention to the base clauses and free modifiers. Collect 3-4 sentences from novels, etc. for next day.

Assignment Noun Phrases

1. Underline the free noun modifiers in the following sentences.

   a. Then the other voice laughed too, a lower sound, full of soft easy amusement. - W.V.T. Clark

   b. She turned at the door, a black wraith with yellowed aqueous eyes. - Wm. Styron

   c. There was a smell there, a hot, sour smell that made Boone wrinkle his nose. - A.B. Guthrie

   d. When he was not in school the manageress was accompanied by her son, a large boy with a malicious face that forever grinned under a sailor cap. - Jean Stafford

2. In this exercise you will develop your own modifiers, using as many varieties as possible. The base clause and the noun heads are provided for your use.

   a. 1 Dan drove his dad's new car,
   2 _____ (adjective), _____ (adjective) body,
   2 _____ (adjective), _____ (adjective) wheels,
   2 _____ (adjective) _____ (adjective) caburetor.

   b. 1 It was a quaint city,
   2 _____ (adjective), _____ (adjective) buildings,
   2 _____ (adjective), _____ (adjective) streets,
   2 _____ (adjective), _____ (adjective) parks.

   c. 1 She was pretty,
   2 _____ (adjective), _____ (adjective) blonde,
   2 _____ (adjective), _____ (adjective) eyes.

3. In this exercise you are asked to construct your own main clause and at least two modifying noun phrases. The noun to be used in the base clause is underlined. The noun heads for the free modifiers are also set out.
   Example: car: colour, trim, wheels.
   1 Sue drew a picture of her ideal car,
   2 the vivid exterior colour,
   2 the contrasting interior trim,
   2 the brightly shiny wire wheels.

   a. river: water, fish, boats.
   _____

   b. packages: groceries, shoes, shirts.
   _____

   c. summer: days, evenings, weeks.
   _____

Assignment - Verb Phrase

1. In this exercise you are asked to supply the verb phrase that uses the verb head called for. You are asked to use a present participle or a past participle as the verb head.

   a. 1 She walked across the stone driveway carefully,
   2 _____.
   verb phrase - pres. participle as headword

   b. 1 The quarterback ran quickly down the side line,
   2 _____.
   verb phrase - past. participle as headword

   c. 1 The hungry prisoner ate greedily,
   2 _____,
   verb phrase - pres. part. as verb head
   2 _____.
   verb phrase - pres. part. as verb head

   d. 1 The angry mob broke into the building,
   2 _____,
   verb phrase - past part. as verb head
   2 _____.
   verb phrase - past part. as verb head

2. a. In this exercise you are asked to construct five or six base clauses, stated in general terms, which advance the action of an incident, e.g. A football game, a fight, a humorous incident, an accident, etc. Remember, each base clause must follow in order so as to advance the action about which you are writing. Skip two or three lines between each base clause.

   b. Now go over each base clause and add as many free modifiers as you require to sharpen the image of the action presented in each base clause.

Assignment - Prepositional Phrase

1. In this exercise you are asked to draw a line under the entire noun phrase modifier and enclose the prepositional phrase in brackets.
   Example: Her hair was brushed back from her face, very black and bright (<u>like the hair on a china doll</u>.)
   -D. Baker

   a. It was a short, stocky figure, a pudgy, blond man, with a buffalo overcoat.

   b. The rain fell lightly, tiny droplets of water like dots on a newspaper photograph.

   c. Marty walked into the ring, a huge, muscular figure like a Roman gladiator.

   d. He stood there, a lonely figure like a sentinel lighthouse.

2. In this exercise you are asked to provide the second level modifiers. The noun heads are provided for you.
   Example: 1 We liked the old building,
   2 <u>a quaint, old</u> house <u>with many windows</u>.
   adj. adj. prep. phrase-detail

   a. 1 He shuffled across the street,
   2_____, _____, man_____.
   adj. adj. prep. phrase-comparison

   b. 1 Everyone liked the new girl,
   2_____, _____, teenager_____.
   adj. adj. prep.phrase-detail

   c. 1 We threw out the old books,
   2_____,_____ novels,
   adj. adj.
   2_____,_____ comics_____.
   adj. adj. prep.phrase-detail

   d. 1 They gathered on the street,
   2_____,_____ crowd_____.
   adj. adj. prep.phrase-comparison

3. In this exercise you are asked to construct your own base clauses with at least two second-level modifiers. The name to be used in the base clause is underlined. The noun heads for the second-level modifiers are also set out. Use the prepositional phrase to add a further detail or a description.

   a. <u>quarterback</u>: ball, pass, touchdown.
   _____

   b. <u>boxer:</u> man, arms, fists.
   _____

   c. <u>boat</u>: craft, motor, hull.
   _____

Assignment - Absolute Phrase

1. In this exercise you are asked to place a single line under the base clause and a double line under each absolute phrase. (Remember, each absolute phrase has its own subject and predicate. The predicate contains a verbal and its complements, e.g. his hands trembling; her hair flying in the wind; the trees bending.)

   a. Joad could see it ahead of him, its poor branches curving over the way, its load of leaves tattered and scraggly as a molting chicken. - Steinbeck.

   b. Davies' white indoor face was hard with his intensity, his young-looking eyes shining, his big mouth drawn down to be firm ... -W.V.T. Clark

   c. The horse was still there, still excited, snorting at the leaping light and shadows of the lantern, its eyes wild, its nostrils dilated. - F.P. Grove

   d. ... she came in, with her long stride, her head bowed, her face hidden under her hat of dark green velvet.
   D.H. Lawrence.

2. In this exercise you are asked to supply the absolute predicate called for. You may practice adding further details to the predicate if you wish. (Prepositional phrases, etc.)

   a. 1 The bears came up to the camp ground,
   2 their heads_____.
   predicate

   b. 1 The antelope bounded across the field,
   2 its legs_____.
   verb phrase - present participle

   c. 1 The people arrived at the beach early,
   2 the adults_____.
   verb phrase - present participle
   2 the teenagers_____.
   verb phrase - present participle
   2 the children_____.
   verb phrase - present participle

   d. 1 The car was demolished in the accident,
   2 the wheels_____.
   verb phrase - past participle
   2 the doors_____ _____.
   verb phrase - past participle | prep. phrase - comparison
   2 the windshield_____.
   verb phrase - past participle

3. In this exercise you are asked to combine the sets of sentences into a single, compact sentence illustrating the use of the absolute as a free modifier.

   a. The unruly mob rushed into the street. The men were shouting abuses. The policemen were trying to hold them back.
   1_____,
   2_____,
   2_____.

   b. The building fell with a crash. The wooden frame was broken into a million pieces. The concrete pillars were standing like lonely sentinels.
   1_____,
   2_____,
   2_____.

   c. He was a sorry looking creature. His hair was matted and dirty. His clothes were tattered and torn. His hands were gnarled like an oak.
   1_____,
   2_____,
   2_____,
   2_____.

A P P E N D I X E

1. General Directions for Teachers Administering the WET
2. Instructions to Students Writing the WET
3. Instructions to Students Writing the WCT

GENERAL DIRECTIONS FOR TEACHERS

The pretest and posttest paragraphs will each use one period of thirty-five minutes.

In evaluating the paragraphs, the emphasis will be placed on what the students have to say and how well they say it. Students should not be assisted in any way during the writing of the paragraphs. Paragraphs must not be rewritten. Students should be encouraged to write on every other line on their foolscap paper. They may write on both sides of the page. Time should be provided for students to read their completed compositions and make revisions.

The following suggestions may serve as a guide for the students:

Preparation and Organization: (5-10 minutes)
Students should first read the test item which tells them what to write about. They should plan what they want to say and the order in which they want to say it. As soon as they have finished planning, they should begin to write. They will have about 20-25 minutes left for writing.

Writing: (20-25 minutes)
Compositions should be written on foolscap in pencil. Name, grade, and school should be written on the top right hand corner of each paper.

Revision: (5 minutes)
Students should save about 5 minutes at the end of the period to check their papers and make any needed changes. They may make these changes by writing neatly between the lines.

N.B. Students must be reminded to write their names, grade, and school at the top of the page.

INSTRUCTIONS TO STUDENTS WRITING THE WET

Read to Students:

The exercises in this test deal with several important aspects of writing:

1. your variety of expression, or your ability to express your ideas through the use of different words, sentences, phrases and clauses;

2. your clarity of expression, or the choice of various English sentence structures (sentences, phrases, clauses) you select to add description, detail, and/or comparison to convey the meaning intended; and

3. the appropriateness of your expression.

Directions:

This is a 60 minute test consisting of five subtests. The directions for answering the questions are printed at the beginning of each subtest. Read the instructions for writing the section and follow them closely. Write your answers to the questions in the space provided in the test booklet. After you have finished the first section go on to the other sections. If you come to an item you cannot answer, leave it and go on to another item. You may return to this one later. When you finish the test go back and check your answers. Print your name, grade, and school in the spaces provided on the first page of the test booklet. N.B. Please use a pencil for writing the test.

INSTRUCTIONS TO STUDENTS WRITING THE WCT

Read the following instructions with the students.

The purpose of this test is to find out how well you can write a paragraph. You are asked to write a paragraph on the topic given below. You will be given thirty-five minutes to write the paragraph.

Here are a few suggestions that will help you to do your best on the test:

(1) Start planning your paper as soon as you know what you are to write about. Spend about 5-10 minutes planning and organizing your material.

(2) In evaluating your writing, emphasis will be placed on what you have to say and <u>how well you say it.</u> Therefore, you should spend more time getting your ideas down in a clear, well organized form. Write your paragraph on foolscap in pencil. Use every other line on the foolscap paper. Your name, grade, and school should be placed on the top, right hand corner of the page. Spend about 20-25 minutes writing your paragraph.

(3) You should save about 5 minutes at the end of the period to check your paper and make any needed changes. Make your changes neatly by writing between the lines.

A P P E N D I X F

Written Expressional Test

WRITTEN EXPRESSIONAL TEST

Name_____ Total_____
Grade_____
School_____

Subtest: 1

This exercise is designed to test your ability to arrange ideas in an orderly way. When the statements in the items below are placed in order, one idea follows logically from another and the whole expression adds to a sequence that carries the reader through the sentence. You are asked to arrange the statements so that the main clause is placed first. Then place the other statements in the order you think best. Write this order by arranging in the space at the right the letters of the statements.

Example: a. the way girls do in illustrations
b. she waved at the audience
c. smiling a little b c a

1. a. a lower sound
b. then the other voice laughed too
c. full of soft, easy amusement _____

2. a. waiting to get everyone's attention
b. as though she were on stage
c. the stewardess stood at the first seats _____

3. a. now she was looking at him
b. as if to see him better
c. squinting a little _____

4. a. delivering a wind like the blow of a fist
b. trucks as long as freighters went roaring by
c. driving the leaves high in the sky _____

5. a. rapid and piercing
b. then many more shrieks rent the air
c. like the yells of some ruthless creature _____

6. a. his head up
b. the bull charged and came out into the corral
c. his body muscles quivering as he looked up at the crowd on the stone walls _____

7. a. heavy little creatures
b. with gray-mottled shells and orange underparts
c. the sand-crabs wriggled on the wire net
d. shaped like scarabs _____

Subtest 2:

In this exercise the original form of the sentence is broken up into three or four individual sentences that are parallel. You are asked to combine the sentences, to form a single, well-organized sentence. You are not required to use all the words in the sentences, but the main ideas must be included in your sentence.

1. The hunter crept to the clearing. The hunter stopped for a moment. The hunter listened to the call of the she-wolf.

_____

2. Peggy drifted onto the stage. She held her head high. She smiled at the audience.

_____

3. The wind swept across the desert. It whistled among the rocks. It howled among the sagebrush. It made horrible sounds like the cries of tortured ghosts.

_____

4. The diver stood fifty feet above the water. The diver smiled a little. The diver flexed his fingers. The muscles on his legs quivered. They looked like taut rubber bands.

_____

5. The gull glides in the warm up-currents for hours. The gull searches the water below. The gull climbs high against the wind. The gull descends like a flash in the search of its food.

_____

6. She walked slowly across the field. She picked her way carefully. She was afraid she would fall. Her dainty feet scarcely touched the painted rocks.

_____

7. The boys ran across the park. They skipped among the painted poles. They threw the frisbees back and forth. Their frisbees hover in the still air. They look like flying saucers.

_____

Subtest 3:

In this exercise the original sentence is broken up into two or more individual sentences. You are asked to combine the sentences to form a single sentence. You may rearrange the sentences, or use constructions which will help you to present a clear, complete picture of the action or image presented in the first sentence.

1. The countryside was dotted with hugh rocks. There were a few isolated pastures. An old weatherbeaten shack stood on the rocky hill.

_____

2. He could smell it too. It was the exciting smell of freshly baked bread.

_____

3. He arrived in the middle of winter. He was a pudgy man. He was dressed in a heavy buffalo coat.

_____

4. I heard the other boys laughing. The sound was lower. The sound was full of soft, easy amusement.

_____

5. We spoke to the owner of the lodge. The owner of the lodge was a frail man. He had a tuft of bristly white hair. His hair stuck straight out. It was like a rooster's tail.

_____

6. The filthy room was in keeping with its occupant. He was an unkempt young man. He wore tattered, dirty jeans. His shoes were muddy and unlaced.

_____

7. They were scantily clad. They were slender bodied. They had long legs and sinewy arms. The Indian warriors filed down the mountainside. They were magnificent in their bearing. Their heads were held high. Their bodies glistened in the noonday sun.

_____

Subtest 4:

In this exercise the original sentence is broken up into two or more individual sentences. You are asked to combine the sentences so as to form a single sentence. You are free to arrange the sentences or parts of sentences to secure maximum effectiveness in presenting the image or the action suggested in the first sentence.

1. She dropped the tray on the counter. The plates clattered down on the floor. The water sloshed onto the laps of the customers. The customers were bewildered.

_____

2. She swooped up her purse. She swept towards the door. Her diamond bracelets twinkled in the pale light.

_____

3. The quarterback danced down the sideline. He ran with his knees reaching high. He held his left arm rigid, ready for the opposing tackler.

_____

4. Late that evening the tired soldiers reached their camp. The soldiers' feet were swollen in their heavy boots. The soldiers' pack straps cut into their shoulders.

_____

5. The bear ambled across the campgrounds. The bear held its head high. The bear sniffed the air. The bear's brown eyes rolled from side to side.

_____

6. David followed her down the dark trail. David held the flickering lantern in his left hand. The light glowed in the soft blackness. The light danced on the wet slippery rocks.

_____

7. The clown pulled at his hat. It was a small red hat. The hat had tassels at the top. The peak of the hat was slightly worn. It was frayed at the brim.

_____

Subtest 5:

In this exercise you are given the opportunity to supply most of the material for your sentences. Write a well-organized, compact sentence to describe clearly the person, object, or thing provided on the left hand side of the page. Be sure to add details, description, and comparison to sharpen the image presented in the base or main clause.

1. hobo

_____

2. haunted house

_____

3. hot rod

_____

4. mob

_____

5. stallion

_____

6. ballet dancer

_____

7. quarterback

_____

A P P E N D I X G

Written Composition Test

1. Pretest:
   A. Descriptive
   B. Narrative
   C. Expository

2. Posttest:
   A. Descriptive
   B. Narrative
   C. Expository

Pretest Paragraph A

"My Favorite T.V. Character"

(In this paragraph you are asked to describe your favorite T.V. character to a friend who has never seen him or her.)

N.B. Please write your name, grade, and school on the top, right hand corner of the page.

Pretest Paragraph B

"An Automobile Accident"

(You are asked to tell about an automobile accident, including a description of the actions of two or more people involved in the accident. Remember you are relating this incident to a friend who has not seen it.)

N.B. Please write your name, grade, and school on the top, right hand corner of the page.

Pretest Paragraph C

Explanation: "Why I Like A Particular Musical Group"
or
"Why I Dislike A Particular Musical Group"

(In this paragraph you are asked to explain clearly to a friend why you like or why you dislike a particular musical group.)

N.B. Please write your name, grade, and school on the top, right hand corner of the page.

Posttest Paragraph A

"My Favorite Real Person"

(In this paragraph you are asked to describe your favorite friend, or a member of your family, or a person you know well to a friend who has never seen that person.)

N.B. Please write your name, grade, and school on the top, right hand corner of the page.

Posttest Paragraph B

"A Fire"

(In this paragraph you are asked to tell about a building on fire, including a description of the actions of two or more people caught in the burning building. Remember, you are relating this incident to a friend who has not witnessed the fire.)

N.B. Please write your name, grade, and school on the top, right hand corner of the page.

Posttest Paragraph C

Explanation: "Why I Like a Particular Sport or Game"
or
"Why I Dislike a Particular Sport or Game"

(In this paragraph you are asked to explain clearly to a friend why you like a particular sport or game, or why you dislike a particular sport or game.)

N.B. Please write your name, grade, and school on the top, right hand corner of the page.

A P P E N D I X H

Instructions to Judges

INSTRUCTIONS TO JUDGES

The paragraphs that you will evaluate were written by students in a junior high school. The instructions printed below will assist you in your evaluation.

READ THE INSTRUCTIONS CAREFULLY AND FOLLOW THEM AS CLOSELY AS POSSIBLE

(1) The students at each level were given a topic and were asked to describe, narrate, or explain the topic for a particular audience - a friend. A time limit of 40 minutes was set for all students.

(2) You are asked to judge how well the writer has adapted his utterance to his context, his audience, and his purpose. The following general questions may help to guide you:

(a) What is the goal of the writer?
(b) Is the context original, interesting, worthwhile?
(c) Has the writer chosen words and syntactic constructions that allow for the derivation of his intent?
(d) How do all the components of his writing (details, comparisons, descriptions) tend to fulfill that intention?

(3) In the actual evaluation, you are asked to read each paper rapidly for a total impression and then assign a rating of 1 to 4. An interpretation of the 4 point scale is presented below:

(a) obviously below a reasonable standard,
(b) not sufficient promise or competence to be considered in the upper half,
(c) clearly competent, promise of effective performance,
(d) superior, not perfect, but very good, effective.

(4) Read the first five papers at each sitting without assigning a grade. At the end of the sitting, read these papers again and at this time the grade should be assigned. Replace the papers in the order in which you found them.

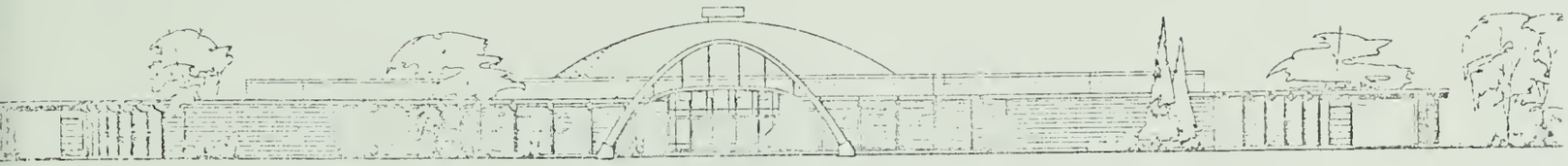
(5) After a complete set has been evaluated read every twentieth paper to satisfy yourself that you have been consistent in your evaluation.

(6) Please rate each paper on its own merits without concern for a normal distribution of scores. Do not allow students' handwriting to influence your grades.

(7) Record all grades on the score sheets accompanying the paragraphs.

A P P E N D I X I

Letter of Recommendation - Re: Judges



hillcrest junior high school

16400 - 80 Avenue, Edmonton 52, Alberta
telephone 489 - 2516
EDMONTON PUBLIC SCHOOL BOARD #7

PRINCIPAL
NICHOLSON, B.A., B.Ed.

STANT PRINCIPAL
L. TAYLOR, B.Ed.

To whom it may concern:

Re: Mrs. G. Bell and Mrs. M. Kreter

I have known both Mrs. Bell and Mrs. Kreter for a number of years. For the past five years, Mrs, Bell has been teaching English at McKernan Junior High School. Mrs. Kreter has been teaching English at McKernan for the past three years.

Both of these people are excellent teachers of English and are held in high esteem by their colleagues, the students, and the parents in that school community. As well, both of these teachers have been selected as cooperating teachers in the University Student-teaching Program.

Without any reservation, I recommend them, believing they will do a competent job in evaluating the students' paragraphs for Mr. Joel Gajadharsingh's experiment in the rhetoric of the sentence.

A P P E N D I X J

Ratings Assigned by Judges to the Five Pre Experiment Paragraphs

RATINGS ASSIGNED BY JUDGES TO THE FIVE PRE EXPERIMENT PARAGRAPHS

Paragraphs	Judge A	Judge B	Judge C
1.(professional)	4	4	4
2.(professional)	3	4	4
3.(student)	3	3	3
4.(student)	3	3	3
5.(professional)	2	2	2

A P P E N D I X K

WET: Test-Retest Reliability Raw Scores

WET: TEST-RETEST RELIABILITY RAW SCORES

Student	Test Subtests					Total	Retest Subtests					Total
	A	B	C	D	E		A	B	C	D	E	
1	10	12	44	24	6	96	10	18	42	26	12	108
2	14	22	34	12	0	82	16	22	32	13	0	83
3	10	18	20	16	8	72	12	20	22	18	8	80
4	8	18	64	54	10	154	8	20	68	56	10	162
5	12	2	60	26	16	116	12	16	62	26	18	134
6	16	38	32	28	42	156	16	32	36	31	51	166
7	14	26	40	38	20	112	14	24	38	42	20	138
8	6	28	22	0	0	56	6	26	24	0	0	56
9	8	10	12	18	8	56	8	10	10	18	6	52
10	8	20	30	20	0	78	10	24	32	22	0	88

A P P E N D I X L

Frequency Count

A. Written Composition Test

B. Written Expressional Test

(By Treatment, By Grade, and By Ability)

A. WRITTEN COMPOSITION TEST

Grade 7 - Experimental

High Ability

Pretest									Posttest								
NP*	AP	PP	VP	Abs. P	TFM	BC	TU	ITU	NP	AP	PP	VP	Abs. P	TFM	BC	TU	ITU
0	0	0	0	0	0	130	183	0	00	04	07	09	04	024	100	247	04
0	0	0	0	0	0	218	264	0	03	08	00	10	12	033	088	262	06
0	0	0	0	0	0	126	160	0	05	02	02	12	08	029	113	256	05
0	0	0	0	0	0	162	197	0	01	02	03	18	06	030	109	245	10
0	0	0	0	0	0	213	228	0	00	02	04	07	00	013	141	292	04
0	0	0	0	0	0	141	180	0	01	04	02	14	06	027	110	299	08
1	0	0	0	0	1	214	217	0	00	05	02	14	06	027	109	267	06
0	0	0	0	0	0	210	225	0	01	02	03	05	02	013	112	206	01
1	0	0	2	0	3	170	210	0	00	02	01	17	02	022	108	262	04
0	0	0	0	0	0	154	193	0	00	03	03	08	00	014	091	215	02
1	0	0	0	0	1	156	181	0	02	03	06	16	04	031	097	279	06
0	0	0	0	0	0	150	179	0	00	01	02	12	05	020	107	277	02

Mid Ability

1	0	0	0	0	1	123	135	0	00	00	01	01	02	004	107	132	01
0	0	0	0	0	0	177	188	0	01	02	04	19	05	031	125	297	05
0	0	0	0	0	0	121	142	0	00	02	02	07	07	018	137	274	04
0	0	0	0	0	0	182	218	0	01	13	01	13	07	035	126	281	08
0	0	0	0	0	0	162	191	0	04	04	08	14	02	032	121	295	06
0	0	0	0	0	0	133	168	0	03	04	08	08	00	023	086	190	03
0	0	0	0	0	0	156	170	0	04	08	00	21	02	035	112	270	07
0	0	0	0	0	0	131	154	0	01	03	03	00	02	009	089	185	04
0	0	0	0	0	0	172	191	0	00	04	06	21	04	035	101	261	09
0	0	0	0	0	0	180	200	0	01	07	02	05	00	015	096	167	00
0	0	0	0	0	0	164	185	0	04	03	00	11	00	018	097	190	05
0	0	0	0	0	0	192	203	0	00	04	01	06	07	018	113	224	04

*NP - Noun Phrase
AP - Adjective Phrase
PP - Prepositional Phrase
VP - Verb Phrase
Abs. P. - Absolute Phrase

TFM - Total Free Modifiers
BC - Base Clause
TU - T-Unit
ITU - Intra-T-Unit Coordination

Pretest — Low Ability — Posttest

NP	AP	PP	VP	Abs. P	TFM	BC	TU	ITU	NP	AP	PP	VP	Abs. P	TFM	BC	TU	ITU
0	0	0	0	0	0	120	165	0	01	00	00	05	00	006	124	185	02
0	0	0	0	1	1	183	206	0	01	07	00	15	02	025	103	248	05
0	0	0	0	0	0	147	181	0	04	06	02	14	00	026	144	299	07
1	0	0	0	0	1	212	244	0	00	00	01	12	00	013	122	303	07
0	0	0	0	0	0	136	150	0	03	00	06	14	06	029	082	238	05
0	0	0	0	0	0	116	129	0	00	00	02	06	00	008	124	244	02
0	1	0	1	0	2	188	201	0	02	05	03	10	03	023	114	306	01
0	0	0	0	0	0	145	179	0	01	13	01	18	05	038	101	251	07
0	0	0	0	0	0	173	206	0	00	00	03	05	02	010	102	183	01
0	0	0	0	0	0	123	149	0	00	14	04	05	01	024	109	181	01
0	0	0	0	0	0	172	187	0	05	08	01	18	03	035	096	242	07
0	0	0	0	0	0	177	198	0	03	00	04	17	02	026	091	217	05

Grade 7 - Control

Pretest — High Ability — Posttest

0	0	0	0	0	0	177	198	0	00	00	00	00	00	00	107	140	00
0	0	0	0	0	0	143	164	0	00	00	00	00	00	00	148	190	00
0	0	0	0	0	0	116	136	0	00	00	00	00	00	00	111	156	00
0	0	0	2	0	2	124	182	0	00	00	00	00	00	00	142	228	00
0	0	0	1	0	1	119	176	0	00	00	00	00	00	00	129	173	00
0	0	0	0	0	0	150	180	0	00	00	00	00	00	00	118	174	00
0	0	0	0	0	0	126	151	0	00	00	00	00	00	00	133	143	00
0	0	0	0	0	0	126	157	0	00	00	00	01	00	01	103	162	00
0	0	0	0	0	0	117	128	0	00	00	00	00	00	00	123	156	00
0	0	0	0	0	0	126	154	0	00	00	00	00	00	00	117	148	00
0	0	0	0	0	0	118	167	0	00	00	00	00	00	00	118	203	00
0	0	0	0	0	0	131	156	0	00	00	00	00	00	00	120	158	00

Mid Ability

0	0	0	0	0	0	138	179	0	00	00	00	00	00	00	101	150	00
0	0	0	0	0	0	127	165	0	00	00	00	01	00	00	151	173	00
1	0	0	0	0	1	139	192	0	01	00	00	00	00	01	144	220	00
0	0	0	0	0	0	142	158	0	00	00	00	00	00	00	130	166	00
0	0	0	0	0	0	115	145	0	00	00	00	00	00	00	128	152	00
0	0	0	0	0	0	092	132	0	00	00	00	00	00	00	107	150	00
0	0	0	0	0	0	134	184	0	00	00	00	00	00	00	149	171	00
0	0	0	0	0	0	118	148	0	00	00	00	00	00	00	136	177	00
0	0	0	0	0	0	154	168	0	00	00	00	00	00	00	111	151	00
0	0	0	0	0	0	120	140	0	00	00	00	00	00	00	127	150	00
0	0	0	0	0	0	130	178	0	00	00	00	00	00	00	118	172	00
0	0	0	0	0	0	129	183	0	00	00	00	00	00	00	132	169	00

Pretest — Low Ability — Posttest

NP	AP	PP	VP	Abs. P	TFM	BC	TU	ITU	NP	AP	PP	VP	Abs. P	TFM	BC	TU	ITU
0	0	0	0	0	0	106	114	0	00	00	00	00	00	00	126	142	00
0	0	0	0	0	0	156	165	0	00	00	00	00	00	00	119	186	00
0	0	0	0	0	0	097	097	0	00	00	00	00	00	00	121	152	00
0	1	1	0	0	2	093	130	0	00	00	00	00	00	00	114	144	00
0	0	0	0	0	0	157	105	0	00	00	00	00	00	00	127	145	00
0	0	0	0	0	0	123	139	0	00	00	00	00	00	00	113	138	00
0	0	0	0	0	0	134	154	0	00	00	00	00	00	00	140	152	00
0	0	0	0	0	0	154	202	0	00	00	00	00	00	00	154	188	00
0	0	0	1	0	1	129	180	0	00	00	00	00	00	00	122	195	00
0	0	0	0	0	0	108	143	0	00	00	00	00	00	00	130	190	00
0	0	0	0	0	0	114	135	0	00	00	00	01	00	00	107	188	00
0	0	0	0	0	0	117	127	0	00	00	00	00	00	00	119	119	00

Grade 8 - Experimental

Pretest — High Ability — Posttest

1	0	0	0	0	1	134	192	0	03	00	02	19	14	38	092	291	10
0	0	0	0	0	0	129	153	0	02	07	03	06	01	19	115	215	04
0	0	0	0	0	0	126	178	0	05	07	00	20	04	36	085	237	08
0	0	0	0	0	0	152	143	0	03	08	02	18	05	36	089	264	07
0	0	0	0	0	0	166	197	0	06	07	01	08	07	29	100	231	07
0	0	0	0	0	0	100	140	0	02	04	05	09	10	30	095	275	06
0	0	0	0	0	0	115	154	0	08	07	02	08	07	32	104	264	06
0	0	0	0	0	0	138	180	0	00	00	03	04	00	47	111	226	01
0	0	0	0	0	0	114	133	0	00	00	10	09	08	27	094	247	05
0	0	0	0	0	0	137	167	0	01	04	05	11	12	33	094	315	09
0	0	0	0	0	0	113	186	0	06	13	01	10	02	32	087	238	05
0	0	0	0	0	0	116	131	0	09	07	03	17	07	43	102	300	09

Pretest — Mid Ability — Posttest

1	0	0	0	0	1	132	163	0	00	01	09	11	03	24	098	253	04
0	0	0	0	0	0	138	161	0	01	08	04	11	07	31	089	254	03
0	0	0	0	0	0	144	165	0	01	01	00	10	03	15	095	192	03
0	0	0	2	0	2	133	167	0	02	02	03	10	08	25	086	233	08
0	0	0	0	0	0	147	178	0	06	01	02	20	07	36	082	263	07
0	0	0	0	0	0	151	180	0	00	06	03	19	06	34	106	275	08
0	0	0	0	0	0	155	164	0	01	00	05	08	13	27	099	239	05
0	0	0	0	0	0	119	151	0	00	00	01	09	00	10	102	196	04
0	0	0	1	0	1	138	200	0	01	01	05	10	05	22	088	247	04
0	0	0	0	0	0	119	138	0	02	02	02	04	11	21	114	276	06
0	0	0	0	0	0	140	177	0	00	00	03	15	07	25	090	207	06
0	0	0	0	0	0	140	166	0	02	09	03	06	08	28	099	223	04

Pretest — Low Ability — Posttest

NP	AP	PP	VP	Abs. P	TFM	BC	TU	ITU	NP	AP	PP	VP	Abs. P	TFM	BC	TU	ITU
0	0	0	0	0	0	134	160	0	03	06	04	26	04	43	097	307	08
0	0	0	0	0	0	124	129	0	00	01	03	05	02	11	115	201	01
0	0	0	0	0	0	128	151	0	01	07	04	26	03	41	114	235	04
0	0	0	0	0	0	132	172	0	00	14	01	09	17	41	098	380	11
0	0	0	2	0	2	133	189	0	03	01	02	18	08	32	088	232	05
0	0	0	0	0	0	150	187	0	02	00	00	09	04	15	112	375	03
0	0	0	0	0	0	142	178	0	01	05	01	17	04	28	113	269	07
1	0	0	3	0	4	147	198	0	00	01	05	08	00	14	111	230	03
0	0	0	0	0	0	146	180	0	02	08	07	10	09	36	111	276	05
0	0	0	0	0	0	133	164	0	00	00	05	12	02	19	107	231	04
0	0	0	0	0	0	117	136	0	02	07	01	11	03	24	090	193	05
0	0	0	0	0	0	125	135	0	00	02	06	06	00	14	103	190	02

Grade 8 - Control

Pretest — High Ability — Posttest

0	0	0	0	0	0	134	165	0	00	00	00	00	00	00	115	157	00
0	0	0	0	0	0	134	186	0	00	00	00	01	00	01	164	223	00
0	0	0	0	0	0	135	181	0	00	00	00	00	00	00	110	168	00
0	0	0	0	0	0	141	160	0	00	00	00	00	00	00	137	177	00
0	0	0	0	0	0	124	159	0	00	00	00	00	00	00	130	181	00
0	0	0	1	0	1	136	178	0	00	00	00	01	00	01	139	173	00
0	1	0	5	0	6	125	182	1	00	00	00	01	00	01	132	175	00
0	1	0	0	0	1	165	203	0	00	00	00	00	00	00	200	207	00
0	0	0	0	0	0	137	205	0	00	00	00	00	00	00	126	127	00
0	0	0	0	0	0	154	170	0	00	00	00	00	00	00	123	143	00
0	0	0	0	0	0	150	205	0	00	00	00	00	00	00	113	153	00
0	0	0	0	0	0	137	192	0	00	00	00	00	00	00	153	189	00

Pretest — Mid Ability — Posttest

0	0	0	0	0	0	117	156	0	00	00	00	00	00	00	122	171	00
0	0	0	0	0	0	130	170	0	00	00	00	00	00	00	141	200	00
0	0	0	0	0	0	108	153	0	00	00	00	01	00	01	136	198	00
0	0	0	0	0	0	135	143	0	00	00	00	00	00	00	110	153	00
0	0	0	0	0	0	138	156	0	00	00	00	00	00	00	158	189	00
0	0	0	0	0	0	132	160	0	00	00	00	00	00	00	113	182	00
0	0	0	0	0	0	139	156	0	00	00	00	00	00	00	123	170	00
0	0	0	0	0	0	128	180	0	00	00	00	00	00	00	159	213	00
0	0	0	2	0	2	163	211	0	00	00	00	00	00	00	155	190	00
0	0	0	0	0	0	140	162	0	00	00	00	03	00	03	123	163	00
0	0	0	0	0	0	145	155	0	00	00	00	00	00	00	148	183	00
0	0	0	0	0	0	144	165	0	00	00	00	00	00	00	140	176	00

Pretest — Low Ability — Posttest

NP	AP	PP	VP	Abs. P	TFM	BC	TU	ITU	NP	AP	PP	VP	Abs. P	TFM	BC	TU	ITU
0	0	0	0	0	0	138	181	0	00	00	00	00	00	00	152	196	00
0	0	0	0	0	0	118	167	0	00	00	00	00	00	00	127	164	00
0	0	0	0	0	0	151	168	0	00	00	00	00	00	00	120	166	00
0	0	0	0	0	0	108	138	0	00	00	00	00	00	00	152	179	00
0	0	0	0	0	0	122	163	0	00	00	00	00	00	00	111	160	00
0	0	1	0	0	1	128	205	0	00	00	00	00	00	00	144	187	00
0	0	0	0	0	0	158	195	0	00	00	00	00	00	00	169	215	00
0	0	0	0	0	0	142	171	0	00	00	00	00	00	00	141	190	00
0	0	0	0	0	0	133	156	0	00	00	00	00	00	00	124	162	00
0	0	0	0	0	0	134	188	0	00	00	00	00	00	00	138	183	00
0	0	0	0	0	0	174	136	0	00	00	00	03	00	03	183	208	00
0	0	0	0	0	0	134	187	0	00	00	00	00	00	00	149	204	00

Grade 9 - Experimental

Pretest — High Ability — Posttest

1	0	0	2	0	3	161	220	0	02	16	07	26	04	55	112	403	10
0	0	0	1	0	1	123	155	0	03	10	05	15	07	40	111	366	07
1	0	1	3	0	5	158	220	0	05	18	02	15	03	43	074	295	08
0	0	0	0	0	0	112	149	0	05	17	03	13	08	46	076	356	04
0	0	0	0	0	0	134	181	0	07	15	01	08	00	31	119	281	05
0	0	1	0	0	1	156	174	0	01	09	02	09	01	22	094	210	05
1	0	1	4	0	6	146	229	0	02	05	03	16	07	33	102	308	05
0	0	0	2	0	2	149	184	0	03	01	04	18	01	27	107	347	06
0	0	0	0	0	0	122	160	0	02	09	02	12	04	29	109	281	05
0	0	0	0	0	0	137	147	0	01	05	07	32	07	52	109	408	10
0	0	0	0	0	0	118	170	0	08	05	06	18	09	46	092	326	10
0	0	0	0	0	0	159	168	0	05	02	04	27	02	40	123	359	08

Pretest — Mid Ability — Posttest

0	0	0	0	0	0	149	175	0	01	00	01	20	00	22	094	211	07
0	0	0	0	0	0	145	176	0	03	09	03	20	04	39	123	290	06
0	0	0	2	0	2	140	200	0	15	03	06	21	06	51	107	383	12
1	0	0	0	0	1	135	165	0	07	00	02	09	05	23	117	205	04
0	0	0	2	0	2	146	206	0	06	07	07	36	11	67	106	516	15
1	0	0	1	1	3	132	212	0	10	12	00	14	03	39	109	275	08
0	0	0	0	0	0	157	190	0	02	07	01	24	05	39	109	315	10
0	0	0	0	0	0	116	145	0	00	00	01	14	01	16	105	252	04
0	0	0	0	0	0	196	216	0	01	02	02	12	05	22	111	320	04
0	0	0	0	0	0	129	183	0	02	09	02	26	09	48	110	444	09
0	0	0	0	0	0	157	200	0	04	10	00	16	06	36	099	310	05
0	0	0	0	0	0	121	179	0	01	09	01	10	05	26	107	224	06

Pretest — Low Ability — Posttest

NP	AP	PP	VP	Abs. P	TFM	BC	TU	ITU	NP	AP	PP	VP	Abs. P	TFM	BC	TU	ITU
0	0	0	3	0	3	156	221	0	05	09	02	13	10	39	100	316	07
0	0	0	0	0	0	145	180	0	05	05	02	22	07	41	112	318	06
0	0	0	0	0	0	105	133	0	01	02	05	02	03	13	090	196	02
1	0	0	0	0	1	132	166	0	01	00	03	13	02	19	135	249	04
0	0	0	0	0	0	120	144	0	00	03	01	05	05	14	132	207	02
0	0	0	0	0	0	119	137	0	01	34	03	08	07	53	107	329	03
0	0	0	0	0	0	136	171	0	02	02	01	03	03	11	104	218	01
0	0	0	0	0	0	145	158	0	06	03	00	20	09	38	111	293	08
0	0	0	0	0	0	133	168	0	01	02	07	08	03	21	100	239	02
0	0	0	0	0	0	133	165	0	03	00	03	08	01	15	153	248	02
0	0	0	3	0	3	141	210	0	01	01	05	17	05	29	112	301	08
0	0	0	0	0	0	121	127	0	00	03	03	07	04	17	099	266	02

Grade 9 - Control

Pretest — High Ability — Posttest

0	0	0	1	0	1	166	217	0	00	00	00	00	01	01	125	174	00
0	1	0	0	1	2	133	218	0	01	00	00	02	01	04	225	268	00
0	0	2	1	0	3	159	238	0	00	00	01	02	01	04	148	230	00
0	0	0	0	0	0	157	212	0	00	00	00	01	00	01	133	188	00
2	0	0	0	0	2	150	195	0	00	00	01	03	00	04	176	229	00
0	0	0	0	0	0	137	219	0	00	00	00	00	00	00	133	232	00
0	0	0	1	0	1	167	222	0	00	00	00	00	00	00	164	224	00
0	0	0	0	0	0	154	200	0	00	00	00	00	00	00	150	195	00
0	0	0	0	0	0	162	172	0	00	00	00	00	00	00	179	218	00
0	0	0	0	0	0	155	232	0	00	00	02	00	00	02	204	276	00
1	0	0	0	0	1	144	230	0	00	00	00	00	00	00	158	252	00
0	0	0	0	0	0	202	244	0	00	00	00	00	00	00	214	280	00

Pretest — Mid Ability — Posttest

0	0	0	0	0	0	155	189	0	00	00	00	00	00	00	156	201	00
0	0	0	3	0	3	145	204	0	00	00	01	01	00	02	165	187	00
0	0	0	0	0	0	144	163	0	00	01	00	00	00	01	164	194	00
1	0	0	0	0	1	129	167	0	00	00	00	00	01	01	150	180	00
0	0	0	0	0	0	148	169	0	00	00	00	00	00	00	146	187	00
1	0	0	0	0	1	121	192	0	00	00	00	00	00	00	140	224	00
0	0	0	0	0	0	135	166	0	00	00	00	01	00	01	169	194	00
0	0	0	0	0	0	141	149	0	00	00	00	00	00	00	135	143	00
0	0	0	1	0	1	110	175	0	00	00	00	02	00	02	169	219	00
0	0	0	0	0	0	151	187	0	00	00	00	00	00	00	148	176	00
0	0	0	0	0	0	163	183	0	00	00	00	00	00	00	141	191	00
0	0	1	1	0	2	135	190	0	00	00	00	00	00	00	160	191	00

Pretest Low Ability Posttest

NP	AP	PP	VP	Abs. P	TFM	BC	TU	ITU	NP	AP	PP	VP	Abs. P	TFM	BC	TU	ITU
1	0	0	0	0	1	141	201	0	02	00	00	00	00	02	127	202	00
0	0	0	0	0	0	157	169	0	00	00	00	00	00	00	156	178	00
0	0	0	0	0	0	140	168	0	00	00	00	00	00	00	150	196	00
0	0	0	0	0	0	098	195	0	00	00	00	00	01	01	166	264	00
1	0	0	0	0	1	167	219	0	00	00	00	00	00	00	141	234	00
0	0	0	0	0	0	150	212	0	00	00	00	01	01	02	162	199	00
0	0	0	0	0	0	139	174	0	00	00	00	00	01	01	134	195	00
1	0	0	0	0	1	132	195	0	00	00	00	00	00	00	160	202	00
0	0	0	0	0	0	131	167	0	00	00	00	00	00	00	146	178	00
0	0	0	0	0	0	114	168	0	00	00	00	00	00	00	148	187	00
0	0	0	2	0	2	127	183	0	00	00	00	00	00	00	128	150	00
0	0	0	0	0	0	151	181	0	00	00	00	00	00	00	142	153	00

B. WRITTEN EXPRESSION TEST

Grade 7 - Experimental

Pretest — High Ability

NP*	AP	PP	VP	Abs. P	TFM	IU
2	1	0	0	0	03	0
0	2	0	2	2	06	1
3	2	0	0	0	05	1
0	1	0	1	0	02	1
0	2	0	0	3	05	1
2	1	0	1	0	04	2
0	2	0	3	0	05	1
0	0	0	4	0	04	1
1	0	0	5	2	08	1
0	2	0	1	0	03	1
3	1	0	3	1	08	2
3	2	2	4	0	09	1

Posttest — High Ability

NP	AP	PP	VP	Abs. P	TFM	IU
4	2	2	17	14	37	10
2	3	2	22	18	45	06
3	2	1	23	13	41	11
2	1	1	23	16	42	10
1	2	2	12	07	22	03
3	2	2	16	12	33	03
3	1	1	25	27	57	07
5	1	4	25	10	42	08
1	2	1	11	09	24	05
3	2	1	10	05	21	07
4	1	3	24	21	53	11
1	1	2	09	14	27	07

Mid Ability

1	1	0	2	1	05	1
0	1	0	1	0	02	0
0	2	0	2	0	04	0
0	1	0	7	0	08	3
1	1	0	3	1	06	2
3	2	0	2	0	07	0
0	1	0	0	0	01	1
1	1	0	1	0	03	0
2	2	0	4	0	08	0
0	1	0	0	2	03	1
3	0	0	1	0	04	1
0	2	0	5	2	09	0

4	2	0	18	10	34	07
7	1	1	10	06	25	09
0	1	1	29	20	51	05
5	2	6	36	14	63	06
1	3	0	04	05	13	03
3	1	0	08	00	12	03
5	1	2	08	15	29	05
2	2	1	10	00	14	05
3	1	2	13	01	18	05
2	1	1	09	07	19	06
3	1	1	17	22	43	08
6	0	1	25	21	52	10

*NP - Noun Phrase
AP - Adjective Phrase
PP - Prepositional Phrase
VP - Verb Phrase
Abs. P - Absolute Phrase
TFM - Total Free Modifiers
IU - Intra-T-Unit Coordination

Pretest — Low Ability — Posttest

NP	AP	PP	VP	Abs. P	TFM	IU	NP	AP	PP	VP	Abs. P	TFM	IU
0	0	0	0	0	00	0	0	2	1	24	12	39	12
8	1	0	8	3	20	3	3	1	0	25	26	55	15
0	0	0	0	0	00	0	2	0	1	11	13	27	08
0	0	0	0	0	00	0	5	2	3	12	04	26	08
0	1	0	0	0	01	0	1	2	0	05	04	12	02
0	2	0	0	0	02	1	1	1	1	01	03	07	07
0	0	0	0	0	00	0	4	1	0	22	15	42	10
0	0	0	0	0	00	0	3	0	0	20	15	38	09
2	0	0	0	0	02	0	3	2	0	04	05	14	07
0	1	0	1	0	02	0	2	1	2	11	18	34	07
1	0	0	9	1	11	6	5	2	02	22	04	33	11
2	0	0	1	0	03	1	1	2	0	13	08	24	04

Grade 7 - Control

High Ability

1	2	0	8	0	11	0	1	2	0	11	00	14	01
2	0	0	2	0	04	0	1	0	0	02	00	03	00
1	0	0	2	2	05	1	2	0	0	11	00	13	01
0	2	0	2	1	05	1	2	2	0	06	02	12	01
0	1	0	1	0	12	1	2	1	0	08	03	14	02
0	1	0	6	0	07	2	0	1	0	14	00	15	03
0	0	0	0	0	00	0	0	1	0	00	02	03	01
4	0	0	0	0	04	1	5	0	0	07	01	13	04
0	0	0	5	5	10	1	1	0	0	03	12	16	01
1	0	0	1	0	02	0	0	0	0	01	00	01	01
2	0	0	0	1	03	1	3	0	0	00	00	03	01
0	0	0	0	0	00	0	0	0	1	01	00	02	00

Mid Ability

4	0	0	0	0	04	1	0	0	0	02	01	03	00
1	0	0	7	0	08	0	2	0	0	12	00	14	04
0	2	0	3	0	05	1	4	2	0	00	00	06	02
0	0	0	0	1	01	2	0	1	0	01	00	02	00
1	0	0	0	0	01	1	0	2	0	01	00	03	01
0	1	0	6	0	07	0	2	0	0	00	00	02	02
0	2	0	1	0	03	0	2	0	0	00	00	02	01
0	0	0	0	0	00	2	0	1	0	00	00	01	01
0	1	0	7	1	09	0	2	0	0	05	00	07	02
0	0	0	1	1	02	0	0	0	0	02	00	02	02
1	0	0	0	1	02	2	0	0	0	00	00	00	00
0	0	0	0	0	00	0	0	0	0	00	00	00	00

Low Ability

Pretest							Posttest						
NP	AP	PP	VP	Abs. P	TFM	IU	NP	AP	PP	VP	Abs. P	TFM	IU
0	0	0	0	0	00	00	0	0	0	00	00	00	00
0	0	0	6	0	06	02	0	0	0	12	00	12	02
0	0	0	0	0	00	00	0	0	0	00	00	00	00
0	1	0	3	0	04	01	0	0	0	00	00	00	00
1	1	0	1	0	03	00	2	0	0	02	00	04	01
1	0	0	3	0	04	01	2	0	0	02	01	05	02
0	0	0	7	1	08	03	0	0	0	13	00	13	04
0	0	0	0	0	00	00	0	0	0	02	00	03	01
1	1	0	0	1	03	02	0	0	0	02	01	03	01
0	0	0	0	0	00	00	0	0	0	00	00	00	00
0	0	0	1	0	01	01	2	0	0	02	00	04	00
0	0	0	1	0	01	00	1	0	0	02	00	03	00

Grade 8 - Experimental

High Ability

10	0	0	0	0	10	03	9	2	3	23	25	62	08
05	0	4	4	0	13	04	6	1	2	28	13	50	13
05	0	4	1	0	10	03	5	0	4	23	14	46	09
03	1	0	2	1	07	03	4	4	2	26	08	44	12
01	2	0	0	1	04	00	4	0	4	28	15	51	14
01	2	4	2	4	13	02	5	0	0	16	13	34	09
02	0	0	1	0	03	02	3	4	4	17	14	39	09
04	1	0	2	2	09	03	6	0	2	25	11	42	09
02	0	0	0	0	02	00	5	0	0	12	08	25	08
06	0	1	0	0	07	05	4	2	2	28	26	62	15
03	0	0	0	0	03	00	5	2	0	07	03	17	09
06	0	0	0	1	07	01	5	3	3	28	11	50	09

Mid Ability

1	0	0	0	1	02	00	5	0	2	23	20	48	12
1	0	0	0	0	01	00	5	4	3	15	08	32	08
2	0	0	0	0	02	01	6	0	2	21	11	38	13
2	0	0	5	2	09	01	5	2	2	18	17	42	09
1	0	0	2	0	03	00	8	0	3	24	12	47	11
2	1	0	2	0	05	00	8	2	0	23	06	39	08
3	1	0	0	0	04	00	4	0	2	08	06	20	05
2	0	0	0	0	02	02	5	0	2	08	06	21	05
5	1	0	0	0	06	04	5	0	4	22	14	45	09
0	0	0	0	3	03	01	8	0	1	06	08	23	04
1	1	0	6	0	08	00	4	0	1	23	17	45	11
0	0	0	0	0	00	00	4	3	3	22	12	41	07

Low Ability

Pretest

NP	AP	PP	VP	Abs. P	TFM	IU
0	0	0	0	0	00	0
0	0	0	0	0	00	0
4	0	0	0	0	04	2
2	0	0	0	0	02	1
3	0	0	3	0	06	3
0	0	0	0	0	00	0
3	0	0	6	0	09	3
2	0	0	0	0	02	0
3	0	0	0	0	03	1
0	0	0	1	0	01	0
0	0	0	0	0	00	0
1	0	0	1	0	02	0

Posttest

NP	AP	PP	VP	Abs. P	TFM	IU
6	0	2	19	12	39	09
4	1	0	18	08	31	09
4	0	0	09	06	19	14
5	1	1	25	11	43	13
4	1	1	28	16	50	13
6	1	0	23	20	50	12
3	0	1	28	03	35	08
5	2	0	23	08	38	15
1	1	3	12	10	27	06
3	3	1	26	09	42	09
4	2	2	08	04	20	06
1	0	0	06	02	09	04

Grade 8 - Control

High Ability

7	1	0	0	0	08	1
1	1	0	0	0	02	0
1	1	0	3	0	05	2
3	0	0	3	1	07	2
3	0	0	5	4	12	4
0	0	0	4	2	06	3
7	2	1	3	3	16	5
9	0	0	6	0	15	4
2	1	0	2	4	09	4
6	0	0	6	2	14	2
2	0	0	7	3	12	2
2	0	0	0	0	02	1

4	1	1	02	00	08	02
6	1	0	03	00	10	03
5	1	0	00	00	06	01
5	0	0	00	01	06	02
3	0	0	09	00	12	03
6	0	0	02	00	08	05
9	2	0	07	00	18	05
5	0	0	03	02	10	02
2	0	0	04	05	11	03
5	0	1	00	00	06	01
5	1	0	01	00	07	05
2	0	0	01	00	03	00

Mid Ability

7	1	0	0	0	08	2
0	2	0	3	0	05	1
2	1	0	1	2	06	2
0	1	0	0	0	01	0
8	0	0	0	0	08	2
7	0	0	3	0	10	3
4	0	1	0	0	05	1
0	0	0	0	1	01	0
1	0	0	0	0	01	0
1	1	0	0	0	02	0
0	0	0	0	1	01	1
3	0	0	0	0	03	0

2	1	1	02	01	07	03
8	2	0	03	02	15	02
7	1	0	07	01	16	03
0	0	0	00	00	00	00
7	0	0	03	00	10	03
7	0	0	02	03	12	02
0	0	0	00	00	00	00
4	0	1	00	00	05	01
2	1	0	00	00	03	00
4	1	0	05	01	11	01
3	0	0	00	00	03	00
3	0	0	02	00	05	02

Low Ability

Pretest							Posttest						
NP	AP	PP	VP	P Abs.	TFM	IU	NP	AP	PP	VP	P Abs.	TFM	IU
5	0	0	1	0	06	2	3	0	0	01	00	04	01
1	0	0	3	1	05	1	3	0	0	03	00	06	01
1	0	0	9	1	11	3	2	0	0	00	00	02	01
5	0	0	0	0	05	2	6	0	0	00	00	06	02
2	1	0	0	3	06	1	2	1	0	00	01	04	01
5	1	0	0	0	06	2	5	1	0	00	00	06	01
4	0	0	3	0	07	3	4	0	0	04	00	08	03
4	0	0	0	0	04	1	4	0	0	01	00	05	01
0	0	0	0	0	00	0	0	0	0	00	00	00	00
3	0	0	0	0	03	0	7	0	0	00	00	07	02
2	0	0	0	0	02	1	5	0	0	00	00	05	01
2	0	0	7	2	11	2	6	0	0	02	01	09	02

Grade 9 - Experimental

High Ability

2	1	0	3	1	07	5	6	1	4	33	16	56	08
2	1	0	6	3	12	6	6	6	2	31	24	69	10
1	2	0	4	3	10	2	8	2	4	19	19	52	07
2	0	0	3	4	09	2	4	8	2	21	19	54	10
3	1	0	1	1	06	0	3	0	4	33	12	52	10
0	0	0	4	4	08	4	8	1	3	41	17	70	10
4	1	0	6	2	13	4	8	1	3	19	22	53	08
5	1	0	4	1	11	2	5	2	2	25	18	52	12
1	0	0	1	2	04	0	8	0	4	12	11	32	08
1	0	0	4	0	05	1	5	7	2	36	16	66	09
1	0	0	1	0	02	0	6	0	4	23	14	53	08
5	0	0	0	0	05	2	5	2	2	27	21	57	05

Mid Ability

2	0	0	0	1	03	0	13	4	0	05	31	53	12
3	0	0	5	2	10	4	5	1	2	28	25	61	12
0	0	0	0	2	02	2	3	0	1	27	05	36	08
3	0	0	0	0	03	2	6	0	2	18	14	38	06
1	1	0	3	0	05	1	4	0	2	13	13	30	04
3	0	0	0	0	03	0	6	2	1	18	04	31	09
2	0	0	0	0	02	1	4	0	1	07	10	22	06
0	0	0	4	6	10	3	4	0	2	22	05	31	01
5	1	0	4	0	10	1	6	0	2	30	16	53	09
0	0	1	1	2	04	0	6	0	0	25	07	38	05
2	0	0	0	0	02	1	8	2	1	30	15	56	11
2	0	0	0	0	02	0	6	2	0	14	16	38	07

Pretest — Low Ability

NP	AP	PP	VP	Abs. P	TFM	IU
0	0	0	0	0	00	0
3	2	0	1	0	06	0
5	0	0	6	2	13	0
5	0	0	4	3	12	3
5	2	0	4	0	11	2
2	0	0	2	0	04	0
2	1	0	0	2	05	1
1	0	0	2	0	03	0
1	0	0	1	0	02	0
4	2	0	6	1	13	3
1	0	0	5	0	06	4
1	2	0	6	2	11	2

Posttest — Low Ability

NP	AP	PP	VP	Abs. P	TFM	IU
5	1	2	29	13	50	06
5	6	1	27	11	50	10
5	4	1	31	19	60	13
6	0	3	23	12	41	11
3	5	4	25	16	50	07
8	0	2	22	17	49	07
5	3	1	30	20	59	07
5	2	2	29	13	42	06
5	2	4	35	12	55	09
6	0	1	38	15	60	07
5	2	0	29	14	50	06
4	3	2	24	12	43	11

Grade 9 - Control

High Ability

2	0	0	2	1	05	3
6	0	0	4	0	10	0
3	0	0	0	5	18	6
1	1	0	0	0	02	1
9	0	0	3	0	12	4
3	0	0	0	0	03	1
3	2	0	4	0	09	2
3	1	0	9	0	13	4
4	0	0	2	0	06	3
5	0	0	0	0	05	1
4	1	0	1	0	06	2
2	0	0	1	1	04	1

4	0	1	03	02	10	02
10	0	0	04	01	11	03
5	0	1	02	01	19	06
7	0	0	01	07	15	02
3	0	0	02	00	05	02
1	0	0	04	00	05	00
1	3	0	04	00	05	01
7	0	0	02	02	11	02
4	0	1	03	02	10	02
8	1	0	04	01	14	06
3	1	0	00	01	05	01
3	0	0	01	00	04	01

Mid Ability

4	0	0	0	0	04	1
5	0	0	0	0	05	0
2	1	0	3	0	06	1
1	0	0	5	0	06	1
2	1	0	9	0	12	1
2	0	0	0	0	02	0
0	0	0	0	1	01	0
1	1	0	3	2	07	2
2	0	0	2	1	05	2
1	0	0	0	0	01	0
2	0	0	2	0	04	1
2	0	0	2	0	04	1

3	0	0	03	00	06	01
5	0	0	03	02	10	02
1	0	0	01	02	04	01
5	0	0	05	03	13	02
5	0	0	03	02	10	01
4	0	0	02	01	07	01
8	0	0	02	02	12	02
4	0	1	07	01	13	01
4	0	0	02	01	07	01
4	0	0	04	00	08	01
4	3	0	01	00	08	01
0	1	0	02	00	03	01

Pretest Low Ability Posttest

NP	AP	PP	VP	Abs. P	TFM	IU
2	0	0	0	0	02	1
10	0	0	2	0	12	4
4	0	0	0	2	06	1
2	0	0	0	1	03	0
5	0	0	0	0	05	2
1	0	0	0	0	01	0
4	1	0	1	1	07	1
1	0	0	8	1	10	2
3	0	0	1	0	04	1
2	0	0	2	0	04	3
1	1	0	3	1	06	1
3	0	0	1	1	05	0

NP	AP	PP	VP	Abs. P	TFM	IU
3	0	0	02	00	05	00
3	0	0	01	08	12	04
6	0	0	02	00	08	02
2	1	0	08	01	12	00
9	0	0	03	01	13	04
3	0	0	02	00	05	00
6	0	1	00	00	07	01
2	1	0	06	01	10	02
3	0	0	00	00	03	02
6	0	0	02	01	09	02
5	0	0	05	02	12	02
3	1	0	03	01	08	06

A P P E N D I X M

Written Composition Test: Raw Scores

(By Treatment, By Grade, and By Ability)

Grade 7 - Experimental

Grade 7 - Control

Pretest				Posttest				Pretest				Posttest			
Desc.	Nar.	Exp.	Total	Desc.	Nar.	Exp.	Total	Desc.	Nar.	Exp.	Total	Desc.	Nar.	Exp.	Total
High Ability Subgroup															
04	04	04	12	09	12	08	29	06	05	05	16	06	07	06	19
04	05	05	14	08	09	10	27	03	05	05	13	04	05	06	15
06	05	06	17	10	12	10	32	06	06	05	17	07	06	06	19
04	04	04	12	09	06	06	21	04	04	03	11	04	06	05	15
05	04	05	14	07	08	07	22	05	05	03	13	05	04	03	12
03	03	03	09	09	12	09	30	03	05	03	11	05	04	06	15
Mid Ability Subgroup															
04	04	03	11	09	10	10	29	03	03	03	09	04	06	03	13
06	05	04	15	09	08	09	26	05	05	03	13	05	04	04	13
05	03	03	11	07	05	05	17	05	06	03	14	06	05	04	15
04	04	03	11	04	05	06	15	03	06	03	12	04	06	05	15
03	06	03	12	08	08	08	24	06	03	04	13	04	05	03	12
03	03	04	10	06	08	06	20	03	05	05	13	05	05	05	15
Low Ability Subgroup															
05	03	04	12	07	09	06	22	03	03	03	09	04	05	03	12
03	06	03	12	06	06	07	19	04	04	03	11	04	05	03	12
05	04	03	12	09	10	09	28	03	04	04	11	03	04	03	10
03	03	04	10	06	09	08	23	05	05	03	13	05	05	05	15
03	03	03	09	04	07	03	14	04	03	04	11	05	04	05	14
03	03	03	09	04	05	05	14	04	03	03	10	04	04	03	11

Grade 8 - Experimental								Grade 8 - Control							
Pretest				Posttest				Pretest				Posttest			
Desc.	Nar.	Exp.	Total	Desc.	Nar.	Exp.	Total	Desc.	Nar.	Exp.	Total	Desc.	Nar.	Exp.	Total
High Ability Subgroup															
06	04	03	13	11	11	10	32	09	08	05	22	09	08	08	25
06	03	06	15	10	09	09	28	05	03	05	13	05	06	03	14
06	04	03	13	09	12	10	31	06	05	05	16	08	03	06	17
03	03	03	09	09	06	06	21	05	04	04	13	05	04	04	13
05	06	06	17	10	09	09	28	05	04	04	13	06	06	05	17
04	04	03	11	09	11	10	30	05	04	03	12	06	04	05	15
Mid Ability Subgroup															
06	03	03	12	11	10	08	29	05	04	04	13	06	07	04	17
05	04	03	12	09	10	10	29	06	04	06	16	08	06	05	19
03	04	03	10	09	09	09	27	05	04	03	12	05	04	04	13
06	06	05	17	08	07	06	21	05	05	03	13	06	04	05	15
05	03	03	11	08	09	06	23	03	06	03	12	06	07	07	20
05	04	04	13	09	07	07	23	04	04	04	12	05	05	05	15
Low Ability Subgroup															
03	05	03	11	10	12	09	31	05	03	03	11	06	04	04	14
03	03	03	09	06	05	03	14	06	03	06	15	06	05	06	17
03	04	03	10	09	12	10	31	04	04	03	11	04	06	03	13
03	05	03	11	10	08	12	30	03	03	03	09	03	03	03	09
05	06	03	14	10	09	08	27	05	05	03	13	05	04	05	14
05	03	03	11	06	09	06	21	03	03	03	09	05	03	03	11

Grade 9 - Experimental								Grade 9 - Control							
Pretest				Posttest				Pretest				Posttest			
Desc.	Nar.	Exp.	Total	Desc.	Nar.	Exp.	Total	Desc.	Nar.	Exp.	Total	Desc.	Nar.	Exp.	Total
High Ability Subgroup															
06	06	04	16	12	12	10	34	06	06	03	15	07	07	04	18
05	03	05	13	12	12	06	30	05	05	06	16	07	07	07	21
06	07	05	18	09	10	10	29	05	05	05	15	06	07	07	20
06	03	04	13	09	10	10	29	06	05	03	14	07	06	06	19
05	04	04	13	06	06	06	18	06	04	06	16	07	06	07	20
06	05	04	15	09	10	09	28	05	03	03	11	05	05	05	15
Mid Ability Subgroup															
03	03	03	09	08	10	07	25	05	06	05	16	07	06	04	17
06	05	03	14	10	12	12	34	03	04	05	12	05	06	04	15
05	04	05	14	08	09	09	26	05	05	03	13	06	07	06	19
05	03	03	11	06	06	08	20	06	03	05	14	08	03	04	15
08	07	04	19	10	10	09	29	05	03	03	11	05	03	05	13
06	03	03	12	10	10	11	31	05	06	05	16	06	06	05	17
Low Ability Subgroup															
03	05	03	11	09	10	09	28	04	04	04	12	06	04	04	14
05	06	03	14	12	10	10	32	06	05	03	14	06	06	04	16
04	05	04	13	07	08	07	22	05	03	03	11	05	06	04	15
03	03	03	09	05	08	08	21	03	06	04	13	05	07	05	17
06	06	05	17	06	09	16	21	05	04	03	12	05	05	04	14
06	03	03	12	08	07	07	22	05	03	03	11	06	05	05	16

A P P E N D I X N

Written Expressional Test: Raw Scores

(By Treatment, By Grade, and By Ability)

Grade 7 - Experimental

High Ability

Pre Subtests					Post Subtests				
1	2	3	4	5	1	2	3	4	5
21	021	018	019	004	24	089	069	097	098
16	013	039	051	004	33	134	122	079	166
12	015	030	043	011	25	181	090	139	024
08	000	011	006	018	29	113	044	092	140
08	017	052	022	000	33	082	038	054	091
08	004	024	009	012	25	152	070	000	133
16	021	019	028	019	24	134	120	103	120
20	016	000	047	000	29	114	089	094	102
25	020	057	033	040	29	091	015	098	030
25	017	017	040	034	16	144	072	046	032
20	014	042	044	000	29	160	072	132	158
16	002	029	040	023	29	107	051	070	073

Mid Ability

12	017	006	045	029	29	095	064	078	070
12	002	015	020	025	33	082	090	072	036
16	014	016	009	021	24	168	060	160	160
12	032	021	062	022	20	136	097	142	182
20	007	041	035	015	20	033	038	026	044
12	006	035	017	026	20	017	030	017	034
16	000	017	027	000	29	111	071	055	100
04	002	001	012	015	25	069	023	021	044
12	000	029	040	047	21	084	042	029	000
12	000	025	000	000	12	057	030	050	078
16	012	033	021	030	29	129	098	109	192
16	014	037	042	006	24	126	073	124	214

Low Ability

08	000	008	017	000	33	138	036	116	099
16	035	024	061	009	20	159	067	142	220
12	012	020	012	000	24	079	070	055	140
08	009	009	001	000	16	053	054	060	117
08	000	000	012	006	25	049	009	045	039
12	009	006	017	000	16	043	000	046	065
08	002	000	037	000	29	132	080	079	152
12	006	024	011	000	20	086	035	083	167
08	005	012	017	001	20	044	035	050	051
08	009	006	027	018	25	072	081	119	124
20	019	048	085	017	24	084	109	091	077
08	002	025	024	013	29	063	060	079	039

Grade 7 - Control

High Ability

Pre Subtests					Post Subtests				
1	2	3	4	5	1	2	3	4	5
29	062	017	030	019	16	103	030	038	019
12	034	027	044	020	12	030	016	008	016
20	009	023	047	013	13	080	039	024	012
24	059	000	045	041	16	062	042	052	064
21	067	017	022	033	25	103	047	028	010
13	064	000	021	002	13	099	009	040	000
08	009	000	019	028	51	025	005	025	015
12	038	038	036	016	24	044	023	090	014
17	028	052	075	009	20	032	036	039	014
08	019	022	022	015	08	014	010	015	006
08	041	000	040	026	12	016	011	030	008
10	000	000	011	006	04	001	021	003	002

Mid Ability

12	046	001	057	025	16	044	014	024	021
29	067	015	036	033	20	056	041	054	054
04	015	009	027	023	08	027	018	024	027
25	052	002	042	002	17	000	010	013	006
04	000	000	023	030	08	015	000	031	000
08	044	000	037	002	04	027	000	017	004
04	008	021	021	013	20	017	020	016	004
12	009	000	003	015	08	005	000	004	010
20	079	000	029	024	11	091	032	030	016
04	025	012	015	002	04	034	010	017	002
25	040	000	013	007	17	002	017	002	016
20	039	018	012	006	16	014	004	000	008

Low Ability

09	002	000	000	002	04	000	004	006	000
08	051	000	041	026	25	059	000	045	014
04	006	000	000	007	04	000	001	000	014
12	038	000	007	004	16	016	016	024	008
12	006	016	014	017	21	011	019	021	008
21	037	000	013	002	20	038	004	013	004
12	082	000	022	022	17	102	000	023	006
17	024	000	018	017	12	072	000	033	002
12	034	001	034	015	17	009	000	017	015
08	027	000	014	000	04	011	000	016	002
20	031	000	023	016	20	041	000	019	006
12	024	015	028	010	16	036	020	038	022

Grade 8 - Experimental

High Ability

Pre Subtests					Post Subtests				
1	2	3	4	5	1	2	3	4	5
16	042	016	090	014	20	126	123	181	162
12	052	000	066	014	33	177	073	136	121
16	014	000	056	019	33	119	100	115	100
17	048	018	042	004	33	106	040	084	152
12	016	024	025	013	29	123	027	088	213
12	006	000	058	036	29	107	075	091	087
25	055	006	035	008	33	107	060	069	132
21	041	011	067	032	29	082	079	110	181
21	003	017	016	017	29	079	027	025	126
24	056	037	059	021	28	140	115	145	215
08	020	019	030	013	29	076	041	051	132
29	006	000	066	028	28	136	093	130	123

Mid Ability

21	000	000	023	000	16	140	017	150	168
16	003	014	003	008	24	076	098	102	054
16	061	017	038	010	28	107	045	121	184
24	059	040	029	011	28	059	068	122	244
08	019	000	021	000	6	119	090	111	090
08	090	025	062	035	29	113	093	117	015
00	022	000	046	008	12	077	000	094	022
16	019	023	057	011	20	053	084	065	037
29	019	004	069	022	29	150	074	112	060
21	038	000	048	023	21	049	056	073	060
12	025	019	025	000	24	143	047	129	116
25	011	001	024	011	20	147	030	098	079

Low Ability

12	051	003	023	000	29	125	105	104	094
00	022	000	011	002	16	117	043	074	061
24	017	031	055	012	33	098	064	047	119
20	038	029	043	020	24	085	094	078	160
12	051	020	044	024	24	144	082	125	173
12	009	006	006	002	29	191	097	082	145
12	019	018	038	019	33	085	072	058	092
08	025	000	000	004	33	156	095	054	079
04	036	002	034	016	20	094	064	084	081
04	014	017	000	006	21	125	020	075	120
04	000	000	002	010	20	067	055	021	038
06	036	000	040	004	20	065	020	040	030

Grade 8 - Control

High Ability

Pre Subtests					Post Subtests				
1	2	3	4	5	1	2	3	4	5
24	083	056	000	016	25	033	035	023	042
08	016	000	003	008	16	100	000	056	016
25	059	000	026	034	16	022	000	010	008
12	043	035	029	024	08	062	024	032	043
12	050	046	057	020	20	066	036	078	000
21	042	015	042	004	20	064	028	050	044
20	081	033	083	045	16	067	041	060	047
29	062	046	101	008	25	066	036	066	030
20	042	000	112	005	20	071	009	089	023
21	089	025	071	026	20	076	030	073	006
29	114	044	050	030	29	112	036	102	055
04	025	011	000	017	20	033	004	022	019

Mid Ability

12	046	026	065	010	12	052	031	022	000
21	017	021	003	012	16	061	011	099	011
12	074	025	075	036	20	101	065	089	031
12	011	000	003	004	20	000	000	000	004
20	051	026	064	024	12	081	012	058	029
21	060	000	071	031	20	070	040	062	006
12	045	000	019	038	08	016	000	008	007
12	022	016	021	011	21	035	027	047	016
25	019	005	003	011	21	037	017	000	011
16	000	000	000	021	16	032	000	042	023
24	000	000	034	014	24	000	000	024	024
17	019	011	025	021	12	067	034	037	024

Low Ability

12	059	026	037	014	08	045	033	050	025
21	000	000	041	031	08	047	014	037	012
08	089	012	057	008	16	087	029	030	012
25	000	000	036	077	33	022	001	058	024
12	019	008	041	040	08	005	007	042	027
33	066	029	052	026	12	108	016	079	055
08	044	000	072	002	04	052	011	078	000
17	033	003	040	008	08	044	018	042	033
12	000	000	011	008	08	000	000	003	013
12	012	018	029	008	12	000	044	066	010
12	038	000	025	003	04	011	000	053	032
08	074	000	046	004	16	054	015	073	034

Grade 9 - Experimental

High Ability

Pre Subtests					Post Subtests				
1	2	3	4	5	1	2	3	4	5
20	130	000	088	042	33	131	124	147	188
20	138	054	112	037	33	142	142	159	201
12	074	000	062	091	29	094	055	095	220
20	060	000	085	034	29	113	066	138	173
20	000	000	049	058	33	103	070	166	160
24	072	035	057	042	33	148	102	115	205
20	089	009	060	040	29	138	113	149	133
12	067	023	077	019	33	173	157	150	036
13	040	022	045	040	29	093	078	072	056
08	042	033	030	035	25	161	073	125	183
21	029	047	026	017	33	115	080	092	150
29	050	001	091	074	33	130	078	130	157

Mid Ability

20	000	001	000	008	24	106	093	092	185
24	032	016	046	026	24	148	036	148	085
16	063	039	047	057	20	167	092	143	179
12	091	024	044	067	29	088	089	095	168
20	063	034	083	069	21	160	061	110	167
12	035	000	041	017	33	109	128	121	170
08	052	025	037	044	29	160	100	133	160
16	009	038	010	024	24	107	057	131	067
12	044	013	016	015	29	144	099	104	159
25	053	000	081	057	24	146	089	120	212
16	073	000	025	033	24	141	072	136	122
25	047	000	056	041	29	116	070	120	108

Low Ability

20	064	041	052	035	33	116	083	149	249
12	044	023	074	043	24	151	090	154	229
12	000	000	025	024	29	105	069	083	088
12	060	006	065	035	20	079	072	092	120
20	047	010	034	004	16	086	056	067	108
12	000	000	032	041	21	133	052	104	062
08	000	000	024	016	25	088	000	080	058
12	107	010	058	000	29	121	039	079	042
12	063	056	038	002	33	144	057	080	081
08	021	000	034	021	20	127	042	176	132
04	009	000	036	019	33	061	083	128	155

Grade 9 - Control

High Ability

Pre Subtests					Post Subtests				
1	2	3	4	5	1	2	3	4	5
29	038	018	047	028	25	030	029	043	078
25	063	035	074	033	20	068	007	083	059
20	077	002	053	074	29	098	051	082	026
25	060	008	039	014	21	027	044	082	017
29	091	000	085	057	29	050	036	050	037
20	049	001	047	008	25	054	007	042	015
20	062	000	048	055	24	072	023	055	020
25	086	000	065	037	25	099	034	072	057
20	048	017	057	033	20	039	032	071	019
21	033	033	052	009	21	077	001	036	073
24	028	055	042	040	20	038	022	033	045

Mid Ability

20	024	000	057	063	20	040	007	015	017
20	054	022	048	004	20	033	000	084	042
20	054	004	014	008	16	027	001	027	010
20	050	023	024	018	20	053	036	046	028
20	067	032	059	042	20	054	051	085	025
16	021	000	033	014	16	037	000	047	014
21	016	000	023	024	16	054	013	086	044
20	089	022	041	032	33	070	044	051	033
16	054	000	046	010	12	086	000	058	033
16	033	000	041	038	13	045	016	044	004
25	008	004	024	004	20	064	009	057	032
12	006	000	029	002	12	017	011	013	003

Low Ability

12	027	014	024	029	16	033	030	037	042
21	051	017	071	041	12	034	022	128	043
13	022	017	046	059	13	049	019	063	042
20	035	009	014	015	16	066	018	042	022
16	071	000	076	035	20	084	000	074	073
17	024	025	031	031	16	043	020	028	023
08	040	001	044	019	29	038	007	066	032
29	099	007	050	007	24	089	031	057	000
16	019	000	042	026	29	018	000	066	023
16	065	028	040	018	24	046	028	062	032
12	075	041	003	022	08	078	060	048	026
16	073	009	054	018	21	136	030	073	012

A P P E N D I X O

Retention Test - WET: Raw Scores

(Experimental Group, By Grade, and By Ability)

Grade 7 - Experimental

High Ability Subgroup

Post Subtests					Retention Subtests				
1	2	3	4	5	1	2	3	4	5
24	089	069	097	098	29	109	134	083	129
33	134	122	079	166	24	128	136	125	120
25	181	090	139	024	29	136	185	089	202
29	113	044	092	140	29	158	155	110	245
33	082	038	054	091	29	138	109	085	150
25	152	070	000	133	29	181	191	115	161

Mid Ability Subgroup

20	136	097	142	182	24	179	151	150	165
20	033	038	026	044	21	113	142	079	109
20	017	030	017	034	29	132	154	107	099
29	111	071	055	100	25	142	191	122	114
25	069	023	021	044	29	151	163	111	079
21	084	042	029	000	33	165	154	154	225

Low Ability Subgroup

29	132	080	079	152	24	185	187	128	117
20	086	035	083	167	24	055	183	090	162
20	044	035	050	051	24	094	149	114	228
25	072	081	119	124	25	07	135	119	124
24	084	109	091	077	29	129	109	108	075
29	063	060	079	039	25	070	080	079	055

Grade 8 - Experimental

High Ability Subgroup

Post Subtests					Retention Subtests				
1	2	3	4	5	1	2	3	4	5
20	126	123	181	162	33	147	175	134	149
33	177	073	136	121	33	195	191	133	206
33	119	100	115	100	29	168	187	098	157
33	106	040	084	152	33	170	207	103	125
29	123	027	088	213	29	169	117	130	159
29	107	075	091	087	29	175	154	154	211

Mid Ability Subgroup

28	059	068	122	244	29	130	151	079	133
16	119	090	111	090	24	090	147	060	080
29	113	093	117	015	29	166	163	140	227
12	077	000	094	022	33	179	160	099	109
20	053	084	065	037	33	108	211	082	092
29	150	074	112	060	33	176	179	136	183

Low Ability Subgroup

33	085	072	058	092	29	083	159	095	066
33	156	095	054	079	20	070	058	067	041
20	094	064	084	081	29	122	119	070	177
21	125	020	075	120	33	187	146	118	201
20	067	055	021	038	29	189	171	142	111
20	065	020	040	030	33	146	195	065	219

Grade 9 - Experimental

High Ability Subgroup

Post Subtests					Retention Subtests				
1	2	3	4	5	1	2	3	4	5
33	131	124	147	188	33	120	151	117	183
33	142	142	159	201	33	183	149	182	273
29	094	055	095	220	29	149	135	169	217
29	113	066	138	173	29	169	137	129	169
33	103	070	166	160	29	153	113	187	139
33	148	102	115	205	33	175	141	177	197

Mid Ability Subgroup

29	088	089	095	168	33	171	126	127	111
21	160	061	110	167	24	146	152	175	238
33	109	128	121	170	29	126	048	121	147
29	160	100	133	160	33	158	102	132	160
24	107	057	131	067	33	167	136	154	265
29	144	099	104	159	29	146	106	129	159

Low Ability Subgroup

25	088	000	080	058	29	154	128	134	229
29	121	039	079	042	24	185	071	112	222
20	135	091	138	188	21	146	102	166	134
33	144	057	080	081	16	120	106	110	052
20	127	042	176	132	24	102	053	079	099
33	061	083	128	155	29	141	098	120	144

A P P E N D I X P

Retention Test - Narrative Descriptive Paragraph: Raw Scores

(Experimental Group, By Grade, and By Ability)

Grade 7 Experimental		Grade 8 Experimental		Grade 9 Experimental	
		High Ability Subgroup			
Post Narr.	Retent. Narr.	Post Narr.	Retent. Narr.	Post Narr.	Retent. Narr.
12	11	11	10	12	11
09	09	09	10	12	12
12	12	12	10	10	11
06	08	06	09	10	08
08	08	09	09	06	10
12	11	11	10	10	10
		Mid Ability Subgroup			
10	09	10	10	10	10
08	08	10	09	12	10
05	06	09	09	09	09
05	06	07	08	06	09
08	07	09	08	10	10
08	06	07	08	10	10
		Low Ability Subgroup			
09	09	12	10	10	10
06	05	05	06	10	09
10	08	12	10	08	10
09	10	08	09	08	08
07	06	09	09	09	08
05	06	09	09	07	07

A P P E N D I X Q

I.Q. Scores on the Lorge-Thorndike Intelligence Test

I.Q. SCORES ON THE LORGE-THORNDIKE INTELLIGENCE TEST

Sub-jects	Grade 7		Grade 8		Grade 9	
	Exptl.	Control	Exptl.	Control	Exptl.	Control
			High Ability			
01	138	138	136	130	138	134
02	133	128	128	129	136	133
03	132	125	127	129	136	129
04	130	125	127	128	125	127
05	130	124	127	125	124	127
06	130	124	127	124	124	126
07	128	123	125	124	123	125
08	127	122	125	123	123	125
09	124	122	125	122	122	124
10	122	122	124	122	122	124
11	122	121	124	121	121	124
12	121	121	124	121	120	124
			Mid Ability			
13	118	118	119	117	119	119
14	118	118	119	116	119	119
15	118	117	119	115	118	118
16	117	116	117	114	117	118
17	116	116	115	114	116	117
18	116	114	115	113	116	117
19	116	114	113	113	115	115
20	114	113	113	112	113	114
21	114	113	113	112	113	114
22	114	112	113	112	112	114
23	111	110	110	110	112	113
24	111	110	110	110	112	112
			Low Ability			
25	108	108	109	108	109	108
26	108	108	109	107	108	108
27	108	105	109	107	108	108
28	107	105	108	106	107	108
29	107	103	108	105	106	108
30	107	103	108	105	105	107
31	106	102	105	104	104	107
32	105	102	104	104	103	106
33	104	102	103	102	103	103
34	102	101	100	102	100	103
35	102	101	100	091	092	102
36	092	100	098	091	091	098

A P P E N D I X R

Samples of Students Post Written Compositions

A. Experimental Group

I. Descriptive
II. Narrative Descriptive
III. Expository

B. Control Group

I. Descriptive
II. Narrative Descriptive
III. Expository

(The samples included in this appendix were randomly selected from the experimental and control groups at each of the three grade levels. These samples are reproduced below without corrections or revisions.)

A. EXPERIMENTAL GROUP

Grade 7

My Favourite Real Person

Pete's small, a little, thin beast, with a small build, like that of a cat, scrawly, thin and underfed. His body, thin, like a pretzel, looks like it could break any second. His head, small, and round, sits on the pretzel, like a fat, over-stuffed pillow. The hair on him was black, standing on end, like he was chilled to the bone. His eyes, flashing brightly, were deep-set, as if punched in. The cheeks were fat, red like an apple, and always cold, like a gust of wind. His nose, turned-up, freckled, like that of a mud covered stick, looked funny. He runs, fast and sleek, like a falcon, his head twisting from side to side, diving in on its prey, He crys like a baby, brays like a donkey, and screams like a girl. My friend - Pete! (D.N.)

A Fire

It was a huge, old, rickety, wooden building, full of greasy rags, staks of old newspapers, and container upon container of highly flamable kerosene. Suddenly, like a thousand cannons, the explosion rang out, everyone gawking at the building at which it had come from. Smoke billowed from the windows of the building, stinking, blinding, soot black smoke, stinging the eyes of everyone near it. The fire blazed, spitting, roaring, and crackling as if fire was going out of style. The people came running out of the building, panting, coughing, panicking, and rubbing their stinging eyes. The fire engines came roaring down the street, its siren screaming, and the firemen hanging on for dear life. The trapped people, standing at windows, jumping into nets, screaming, were being urged to keep their presence of mind and jump into nets held securely by firemen on the ground. As the fire engines came, crowds gathered to see what was going on, firemen were rushing madly around to try and get everything in order, pushing people roughly out of the way, and making everyone keep back. When the fire was finally put out the area was filled with people and smoke, mostly smoke. People were running hear and there, mostly hear. That was one fire that a lot of people will remember for a long time. (J.S.)

Why I Like Swimming

Swimming is a sport that is fun. My friends and I enjoy it immensly, splashing water at each other, diving deep for nick nacks, and swimming vigorously in strenuous races. I especially enjoy swimming for long periods of time because this tones the mucsles, helps you be more phsically fit, and is a very enjoyable exercise. When you learn how to swim reasonably well you are qualified for many other things such as boating, water skiing and scuba diving. I enjoy swimming and all the things tied to it and I'm sure you will enjoy swimming also if you have never had the opportunity. (A.P.A.)

Grade 8

My Favourite Real Person

She wandered up to the trailer, her old black coat flapping in the wind, her shoulders hunched up, acting as a shield, her face screwed up, like crumpled paper. Mother opened the door, a sudden gust of wind blowing her in, sending the paper scattering. She stood by the door, her hair tousled, the crows feet at the corner of her blue eyes, crinklet as she began to smile. She was a kind woman, alway smiling and laughing. When she laughed, it was a soft laugh, full of human, infectious, making you want to laugh also. She bit into a biscuit, her sparse teeth glittering, as she opened her mouth. She was my favourite person, and I shall always remember her. (G.H.)

A Fire

I walked across the street from the building, an old, rundown, wooden framed building, with ancient features. There were many people in it, walking around delivering messages, busily typing letters, talking about their buisness. All of a sudden there was an explosion, a loud, shrill, booming sound, which frightened everybody around. It was a horrible sight, windows cracking, people screaming and crying for help, pieces of wooden crashing to the ground, flames flashing and rising in the disturbed atmosphere. A crowd gathered, running around like scared rabbits, screaming for help, pushing forward so they could see more. An alarm went off, clanging vigourously, ringing noisily. The bright, red, engines came, speeding down the street, with their sirens clanging and all the men watching the fire with their eyes bulging out. The men jumped out, running to get, trying to unwind the hose, running into the building, trying to get the occupants out. The people ran out, screaming

with terror, yelling for help. The police and an ambulance came, helping the injured people, holding back the crowd, and just hoping the fire would be put out. The firefighters were great, trying to fight the fire, helping all the occupants out, and risking their lives for both the building and the people. (D.K.)

Why I Like Skiing

My favorite sport is skiing, a great outdoor sport. I like it because it is a challenge for me. The big slopes, covered with fluffy white snow is always beautiful. Gliding down the slopes, whizzing by evergreens, zooming over the bumps and hills, avoiding the rocks and clumps is always thrilling. It allows me to be close to nature, seeing the freshly fallen snow, enjoying the climb up to the tree covered slopes, just being alone on the top of the world. It also makes me alert, looking for the safest spots, developing my reflexes. It gives me a chance to meet people, friendly, sport loving people. I enjoy the social hour, sitting around the fire, watching the sparks fly, listening to feats of other skiiers, dreaming of a day when I can be champion. (P.L.)

Grade 9

My Favorite Real Person

She came in the door, a smile lightining her features, like a lamp. Her brown eyes were gleaming, glistening in the sunlight, sparkling like diamonds. Her mouth was smiling, a friendly smile, full of joy and hidden merriment. Her hair was soft, waving dantily, softly flowing in the breeze she created as she walked. Her nose was small, slightly upturned, with a few freckles, as if someone had spilt something on it and then quickly righting the container to prevent any more from falling. Her clothes were neat, her dess simple, yet very pretty, but neatly arranged to give the desired affect. She walked springingly, as if bounding for joy with every step, boldly stepping out. She yelled, a sound full of soft easy amusement, quite soft, and yet determined. In all she was very pretty, standing there, with sunlight streaming onto her, a pretty smile on her lips, her eyes shaded from the sun by her hand. (C.W.)

A Fire

I stood there, blindly staring, like a mechanical toy, my eyes smarting from the smoke, black and acrid. Someone screamed, a shrill, high-pitched, hysterical noise, arousing me, slightly, from my daze. Another scream ascended the stairs, hysterical again, but not as strong as before, like a cry of defeat. The door slammed open. A man, tall and thin, rushed in, coughing, his voice harsh and choked, rasping my name. He grabbed me, muttering to himself, then, he shook his head, muttered again, and taking a tight grip on my shoulders, he shook me, hard. He dragged me down the stairs, long and narrow, hard and rough. I hurt, all over, a funny feeling, wierd, throbbing in my hands, hammering on my head. I looked down, my hands were burned, black and ugly, charred by the monster. I cried out, realizing my fate, afraid for my life. Pawing through the smoke, black and menacing, we managed to make our way to the door, quickly rushing out into the snow, cold and hard, grating against my hands, so soft, but ugly. Suddenly I opened my eyes, and there stood my father, looking protectively towards me. (L.L.)

Why I Like Skiing

There's just something about skiing down the side of a mountain, feeling the icy wind sweep across your face, making you tingle from head to toe, the freezing air bringing tears to your eyes, giving you the irrisistable urge to smile at anyone who passes by you. Skiing gives you a feeling of total freedom, a release of tension, an urge to spread out your wings and fly like a bird. Gliding gracefully down the slope of the mountain, tall, majestic and beautiful, its towering peak blanketed heavily with a layer of hard-packed snow, darting in and out of the many trees you hope not to hit anything, tumbling over the occasional rock, and falling down for the hundreth time, you nearly give up. But upon reaching the bottom of the hill, rosy cheeked, red-faced, and exhausted, you feel proud of yourself that you at least made it all the way down the hill. If you're in the market for a real good time; try skiing. (J.C.)

B. CONTROL GROUP

Grade 7

My Favorite Real Person

My favorite real person is a boy of thirteen. He is smaller than I am in height. He has dark blonde hair which is quite long. He usually wears a brown cord jacket. He also wears jeans with a thick brown belt. He wears glasses to read a book or to whatch Television. His glasses are black which suit him very good. He is left handed and quite strong when he loses his temper. He plays hockey for "West Meadolark's" team and is in the "Bantam B" team. He also attends "Hillcrest" and is in the eighth grade. His hobbies are hunting with his father and skidooing. (T.S.)

A Fire

That was the last of the fire. The Pumpernickle family were now all together outside their house or rather their now demolished house. Yes, all twenty of them. It had always been their home. The fire had started in the room with the fireplace. There was a gay fire in the fire-place, Momma Pupernickle had left the room to go and make some tea. Baby Pumpernickle had be left alone only for about ten minutes. Baby thought the fire to be very interesting and wondered what would happen if he threw his blanket in so he did only half the blanket had laned on the carpet. You can immagine what happened next. Within twenty minutes the entire room was ablaze. The fire department was called and in about five minutes three fire trucks were there fighting the fire, but it was to late. It was a tremendous fire as it was an old, old two story house. No one had been trapped or hurt by the fire, so they would find another home. The house had made a grand fire but now nothing of the house was left. (D.B.)

Why I Like a Particular Sport

I like volley ball because it is an exciting game. It has plenty of action through the whole game. How to play Volley Ball: First of all you get two teams. You put up a net, then, get a ball to play with. Get one team on both sides of the net. Then the referee takes the ball and throws it up in the middle. Each team has a man forward to try and hit the ball. The team that hits the ball on to the other teams court serves first. How to Serve: Takes the ball

in the hand opposite the hand you write with. Lift the ball into the air with your hand and let it go, bring your other hand up fist clenched, palm up and hit the ball hard ennogh to make it go over the net. How to Score: To score you must make the ball land on the other team's court within the boundries. (D.R.)

Grade 8

My Favorite Real Person

She is average height and has blonde hair. Her blue eyes are like sparkling saphires. She has asthma but she won't let that get in the way of anything she likes to do. She is a very popular girl and has a nice personality. She enjoys skating, skiing and almost any summer sport. She is a great fan of the Boston Bruines and watches almost every game. She is a member of our teen club and often goes to work at the skating rink. She also like shopping mostly just to spend money. She is a very active person in school. In music she plays percussion and is very good at it. This is what makes her my favorite person. (L.P.)

A Fire

The fire I would like to tell you about happened last summer at a furniture store. I was started by a natural gas leak. Three people were caught on the top floor. They were too high to jump into a net. So the firemen had to go up a ladder. Meanwhile the blazing fire crept higher and higher. The other firemen franticly but unsuccessfuly tried to hold it down but to no avail. The firemen were still raising the ladder higher and higher but the blistering flames stedily increased the ashes. Now there was doubt amoung the firemen, of wether they could save the people. Now the fire was blazing under the feet of the terrified people. The ladder was just about there, then the despereate people were safe. This is one of the worst fires I've seen. (J.J.)

Why I Like Hockey

It is a thrilling, fast and exciting game. There is lots of hitting, sometimes people get hurt but this can't be helped. It's part of the game and if you get a solid hit the fans like it. There is some suspence when a player is stickhandling down the ice, and scores. Another reason why hockey is such a good sport, is the skating involved. If you can't skate you are useless. Of caorse the best part,

is the pure joy of scoring a goal. Everybody overwelms you. You feel like a million dollar person with money to spare. (B.N.)

Grade 9

My Favourite Real Person

My favourite real person is Sheila. She is average looking. She has long blonde hair, gray eyes, quite a long face and long nose with a little bump in the middle. She has a small build and scrunches her shoulders. The clothes she wears are always nice. They are neat and in style, but they are never too bright or overdone. She has a very nice personality and is always laughing but has the bad habit of always calling people ..... (censor). She jokes a lot and can take a lot of teasing. In all she is a pretty nice kid. (M.H.)

A Fire

The lady screamed as she flapped limply out of the window. As she hit the pavement she was followed by the crushing of a giagantic wall. The horrified lady in suite 3 was on fire and was screaming "my baby my baby". As the fire man shot the ladder up to the lady there was an explosion. It was to late, the whole appartment was raging on fire. There were horrifying screams and the reverberation of the explosion and screams equoed through the shole town. As the fire died out you could smell the burning flesh and see the scorched bodies of the people. (D.D.)

Wy I like the Grande Prix 250

The Grande Prix is usually a very exciting race and can take place in such beautiful places as Mexico city, Paris, London, and many others. There are such great names a McLaren Hulme Gurney. There are such cars as the Chaparrel, Ferrari Lotus, which can exceed 200 miles per hour on the straight aways. The Race is 250 miles long and By the end of the race you feel pretty tired (the driver). This profession which well may be, takes great physical endurance and great mental endurance for even if one is tired he still has to keep going. This is a great sport to watch but nearly every time someone is killed. By either going to fast on a corner or trying to edge an opponent out.

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